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OM nucleic - nucleic search, using sw model

Run on: November 1, 2002, 06:19:23 ; Search time 56 Seconds

(without alignments)
7343.813 Million cell updates/sec

Title: US-09-910-186a-7

Perfect score: 1341

Sequence: 1 gaattacgagtgccacaa.....ggaccgaatgaagaattc 1341

Scoring table: IDENTITY_NUC

Gapop 10.0 , Gapext 1.0

Searched: 441362 seqs, 15338381 residues

Total number of hits satisfying chosen parameters: 882724

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Issued Patents.NA:*

- 1: /cgn2_6/ptodata/1/ina/5A.COMB.seq:*
- 2: /cgn2_6/ptodata/1/ina/5B.COMB.seq:*
- 3: /cgn2_6/ptodata/1/ina/6A.COMB.seq:*
- 4: /cgn2_6/ptodata/1/ina/6B.COMB.seq:*
- 5: /cgn2_6/ptodata/1/ina/PCRTUS.COMB.seq:*
- 6: /cgn2_6/ptodata/1/ina/backfile1.seq:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	522.4	39.0	3509	4	US-09-255-829-19
2	263	19.6	1330	1	US-08-480-604A-22
3	263	19.6	1330	2	US-08-405-466A-22
4	263	19.6	1330	4	US-08-915-136-22
5	263	19.6	1402	1	US-08-480-604A-25
6	263	19.6	1402	1	US-08-405-466A-25
7	263	19.6	1402	4	US-08-915-136-25
8	131.4	9.8	1359	1	US-07-618-312A-3
9	131.4	9.8	1359	1	US-08-280-228-3
10	123	9.2	3891	2	US-08-480-604A-27
11	123	9.2	3891	2	US-08-405-466A-27
12	123	9.2	3891	4	US-08-915-136-27
13	70.6	5.3	5163	4	US-08-700-651-1
14	70.6	5.3	5163	3	US-08-928-361B-4
15	70.6	5.3	5318	3	US-08-928-361B-2
16	70.6	5.3	5318	3	US-08-928-361B-3
17	64	4.8	5311	3	US-08-928-361B-2
18	64	4.8	7334	3	US-08-928-361B-1
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20	55.4	4.1	1359	1	US-08-110-786A-7
21	55.4	4.1	1359	1	US-08-280-228-1
22	55.4	4.1	1858	1	US-08-668-381A-6
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24	43.4	3.2	1430	2	US-08-798-744-25
25	40.4	3.0	1690	2	US-08-276-452A-24
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27	38.4	2.9	198	5	PCT-US95-10668-3

28	38.4	2.9	198	5	PCT-US95-10668-4	Sequence 4, Appl
29	37.6	2.8	2574	4	US-09-255-829-28	Sequence 28, Appl
30	36.8	2.7	9046	1	US-08-227-536-1	Sequence 1, Appl
31	36.8	2.7	9046	5	PCT-US95-04682-1	Sequence 1, Appl
32	36.6	2.7	6826	4	US-09-024-020B-8	Sequence 8, Appl
33	36.6	2.7	6826	4	US-09-425-043-8	Sequence 8, Appl
34	36.4	2.7	8147	4	US-09-514-247A-9	Sequence 9, Appl
35	36	2.7	1149	4	US-09-422-487-6	Sequence 6, Appl
36	36	2.7	1149	4	US-09-378-088A-128	Sequence 128, App
37	36	2.7	18596	4	US-09-318-448-11	Sequence 11, Appl
38	35.6	2.7	3378	1	US-07-972-791-11	Sequence 1, Appl
39	35.2	2.6	198	5	PCT-US95-10668-1	Sequence 1, Appl
40	35.2	2.6	198	5	PCT-US95-10668-2	Sequence 2, Appl
41	35	2.6	4281	4	US-09-351-200-1	Sequence 1, Appl
42	35	2.6	5977	3	US-09-024-020B-1	Sequence 1, Appl
43	35	2.6	5977	4	US-09-425-043-1	Sequence 1, Appl
44	35	2.6	6007	3	US-09-024-020B-2	Sequence 2, Appl
45	35	2.6	6007	4	US-09-425-043-2	Sequence 2, Appl

ALIGNMENTS

RESULT 1
US-09-255-829-19 Application US/09255829
Sequence 19, Patent No. 6461617
GENERAL INFORMATION:
APPLICANT: Shone, Clifford Charles
APPLICANT: Quin, Conrad Padraig
APPLICANT: Foster, Keith Alan
TITLE OF INVENTION: Recombinant Toxin Fragments
NUMBER OF SEQUENCES: 29
CORRESPONDENCE ADDRESS:
ADDRESSEE: STERN, KESSLER, GOLDSTEIN, & FOX P.L.L.C.
STREET: 1100 NEW YORK AVENUE, NW, SUITE 600
CITY: WASHINGTON
STATE: DC
COUNTRY: USA
ZIP: 20005-3934
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30 (EPO)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/255, 829
FILING DATE: 23-FEB-1999
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: PCT/GB97/02273
FILING DATE: 22-AUG-1997
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: US 08/782, 893
FILING DATE: 27-DEC-1996
ATTORNEY/AGENT INFORMATION:
NAME: ESMOND, ROBERT W.
REGISTRATION NUMBER: 32, 893
REFERENCE/DOCKET NUMBER: 1581, 0130002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2540
TELEFAX: 202-371-2600
INFORMATION FOR SEQ ID NO: 19:
SEQUENCE CHARACTERISTICS:
LENGTH: 3509 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
FEATURE:
NAME/KEY: CDS
LOCATION: 1..3509
US-09-255-829-19

Query Match 39.0%; Score 522.4; DB 4; Length 3509;
 Best Local Similarity 71.7%; Pred. No. 4.3e-141;
 Matches 685; Conservative 0; Mismatches 271; Indels 0; Gaps 0;

10 ATGCCAATAATACATCCGAATCCTGAAACATATCATCCGACCGCTTACAA 69
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 2614 GATTAATAATTTAATATATATGAGATATGAGATATGAGATATGAGATAT 2673
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 2674 GACCTTAATGATATATATATATATATATATATATATATATATATATAT 2733
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 2734 ACTGAGATATGACAGACAGACAGACAGACAGACAGACAGACAGACAGAC 2793
 250 ATTCGATATCCGATATGACAGACAGACAGACAGACAGACAGACAGACAG 309
 2794 ATAGATATACCTAATATATATATATATATATATATATATATATATATAT 2853
 310 ATCATATATGATGATGATGATGATGATGATGATGATGATGATGATGAT 369
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 2974 AGGAGATATATGATGATGATGATGATGATGATGATGATGATGATGATG 3033
 490 AACAT 549
 3034 AAT 3093
 550 CGTGAAGATATCTGATGATGATGATGATGATGATGATGATGATGATGAT 609
 3094 AGGAGATATATGATGATGATGATGATGATGATGATGATGATGATGATG 3153
 610 CAGTATATGATGATGATGATGATGATGATGATGATGATGATGATGAT 669
 3154 CAGTAT 3213
 670 GAGAGATATCTGATGATGATGATGATGATGATGATGATGATGATGATG 729
 3214 GAGAGAT 3273
 730 CTGAT 789
 3274 TTAATGAT 3333
 790 CTGAGAGATATCTGATGATGATGATGATGATGATGATGATGATGATGAT 849
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 910 AATCTGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 965
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RESULT 2
 ; US-08-480-604A-22
 ; Sequence 22, Application US/08480604A
 ; Patent No. 5736139

GENERAL INFORMATION:
 APPLICANT: KINK, JOHN A.
 APPLICANT: THALLEY, BRUCE S.
 APPLICANT: PADHYE, NISHA V.
 APPLICANT: FIRCA, JOSEPH R.
 APPLICANT: STAFFORD, DOUGLAS C.
 TITLE OF INVENTION: VACCINE AND ANTITOXIN FOR TREATMENT AND
 PREVENTION OF C. DIFFICILE DISEASE
 NUMBER OF SEQUENCES: 32
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: MEDLEN & CARROLL, LLP
 STREET: 220 MONTGOMERY STREET, SUITE 2200
 CITY: SAN FRANCISCO
 STATE: CALIFORNIA
 COUNTRY: UNITED STATES OF AMERICA
 ZIP: 94104
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patent In Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/480,604A
 FILING DATE: 07-JUN-1995
 CLASSIFICATION: 424
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/422,711
 FILING DATE: 14-APR-1995
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/405,496
 FILING DATE: 16-MAR-1995
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/329,154
 FILING DATE: 25-OCT-1994
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/161,907
 FILING DATE: 02-DEC-1993
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/985,321
 FILING DATE: 04-DEC-1992
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/429,791
 FILING DATE: 31-OCT-1989
 ATTORNEY/AGENT INFORMATION:
 NAME: INGOLIA, DIANE E.
 REGISTRATION NUMBER: 40,027
 REFERENCE/DOCKET NUMBER: OPHD-01763
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 705-8410
 TELEFAX: (415) 397-8338
 INFORMATION FOR SEQ ID NO: 22:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 1330 base pairs
 TYPE: nucleic acid
 STRANDEDNESS: double
 TOPOLOGY: linear
 MOLECULE TYPE: DNA (genomic)
 FEATURE:
 NAME/KEY: CDS
 LOCATION: 1..1314
 US-08-480-604A-22
 Query Match 19.6%; Score 263; DB 1; Length 1330;
 Best Local Similarity 53.9%; Pred. No. 2.5e-66;
 Matches 639; Conservative 0; Mismatches 525; Indels 21; Gaps 4;

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 24 CACTGAATACATCAAGAATCATATATATATATATATATATATATATATAT 83
 75 CAATCTGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 129
 84 TCACCTGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 143

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189 TACTCAGATGACAGAACGAGTTCACAACTGACCTCTCCGTAATCTAAGATCCGCTGT 248
204 TATCCTGATGACAGAACGAGTTCACAACTGACCTCTCCGTAATCTAAGATCCGCTGT 263
249 GATTCGATGACAGAACGAGTTCACAACTGACCTCTCCGTAATCTAAGATCCGCTGT 308
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435 GATGATGACGATGACAGAACGAGTTCACAACTGACCTCTCCGTAATCTAAGATCCGCTGT 494
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555 TCTGATGACGATGACAGAACGAGTTCACAACTGACCTCTCCGTAATCTAAGATCCGCTGT 614
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RESULT 3
US-08-405-496a-22
Sequence 22, Application US/08405496A
Patent No. 5919665
GENERAL INFORMATION:
APPLICANT: WILLIAMS, JAMES A.
TITLE OF INVENTION: VACCINE FOR CLOSTRIDIUM BOTULINUM
TITLE OF INVENTION: NEUROTOXIN
NUMBER OF SEQUENCES: 30
CORRESPONDENCE ADDRESS:
ADDRESSEE: MEDLEN & CARROLL, LLP
STREET: 220 MONTGOMERY STREET, SUITE 2200
CITY: SAN FRANCISCO
STATE: CALIFORNIA
COUNTRY: USA
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/405,496A
FILING DATE: 16-MAR-1995
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/329,154
FILING DATE: 25-OCT-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/161,907
FILING DATE: 02-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/985,321
FILING DATE: 04-DEC-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/429,791
FILING DATE: 31-OCT-1989
ATTORNEY/AGENT INFORMATION:
NAME: INGOLIA, DIANE E.
REGISTRATION NUMBER: 40,027
REFERENCE/DOCKET NUMBER: OPHD-01308
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 1330 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
FEATURE:
NAME/KEY: CDS
LOCATION: 1..1314
US-08-405-496a-22
Query Match 19.6%; Score 263; DB 2; Length 1330;
Best Local Similarity 53.9%; Pred. No. 2,5e-66;
Matches 639; Conservative 0; Mismatches 525; Indels 21; Gaps 4;
15 CAACAATATCAATTCGGAATTCGGAACATATCATCTGAACTCGCTTACAAAGCA 74
24 CACTGATATATCAATCAAGATATCAATATCAATCTGAACTCGCTTACAAAGCA 83
75 CACTGATATATCAATTCGGAATTCGGAACATATCATCTGAACTCGCTTACAAAGCA 129
84 TCACTGATATATCAATTCGGAATTCGGAACATATCATCTGAACTCGCTTACAAAGCA 143
130 -GAAGTGAATGACAGAACGAGTTCACAACTGACCTCTCCGTAATCTAAGATCCGCTGT 188
144 CGATCCGATGACAGAACGAGTTCACAACTGACCTCTCCGTAATCTAAGATCCGCTGT 203

QY 130 -GAAGTGAATGACAGAACAGGATTCAGAACTGACCTCTCCGCTAAGTCCGCTGT 188
 DB 144 CGATCCGATGACAGAAAGATGATCCAGCTGCTGATCAATCTGGAATCTCCAAAATCGAAGT 203
 QY 189 TATCAGAAATGAGAAATCATCTTCACATCCGATTCCTGAGATCTCTGCTTCCTG 248
 DB 204 TATCTGTAAGATGCTATCTGATACAACTCTATGTAAGAAAATCTTCACCTCTCTG 263
 QY 249 GATTGTATCCCGAAATACAAAGACGGTATCCAGAAATTCATCCACATGATATACAC 308
 DB 264 GATCGGTATCCCGAAATATCTCAACCTCC-----ATCTCTGACAAATGATATACAC 314
 QY 309 CATCATCACTGATGAGAAATTAATCTGCTGTTGGAAGATTCATCCAGCGGTACCGTAT 368
 DB 315 CATCTCAACTGATGAGAAACAAATTCGTGTGGAAGTATCTGTGAACATCGGTGAAT 374
 QY 369 CATCTGAGCTGATGATGATCAACGGTAAAGACCAATCTGTATTCCTGATATACAAAT 428
 DB 375 CATCTGAGCTGATGAGGAGACTGACGAAATCAACACCGGTGTGATTCAAATACCTCA 434
 QY 429 CCGTGAAGACATCTCTGATATCAATCAATCCGTGCTTCTGTTACATCAACCAATA--- 485
 DB 435 GATGATCAACATCTCTGATCAATCAATCCGTGATCTGTTACCATCCACCAACATCG 494
 QY 486 CCGTGAACATGCTAAATCTCAATCAACGGTAAACCTGGAATCTAATCCGACATCAAGA 545
 DB 495 TCTGAATACTCCAAATCTCAATCAACGGTAAACCTGGAATCTAATCCGACATCAAGA 554
 QY 546 CATCCGTGAAGTATGCTAAACGGTGAATCAATCTCAAACTGACGCGTACATCGATCG 605
 DB 555 TCTGGTAAACATCCACGGCTTCTAATTAACATGATGTCAACTGACCGGTGTGCTGACAC 614
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 DB 615 TACCGCTACATCTGATCAATCAATCTGATCTGATCAACACCGGATCTGATCGCA 674
 QY 666 TATCGAAGACGCTACAGATCAATCTTACTCCGAAATCTGGAAGTCTGCGGATA 725
 DB 675 AATCAAGACCTGTACAGAACACCAATCTGCTGGAATCTGCTGGAAGTCTGCGGATA 724
 QY 726 TCCGCTGATGATCAACAAAGATTAATATGTTCAATGCTGCTGATCAACAAAGTCTTCAT 785
 DB 735 CTACCTGACGATGACAAACCGTACTATGATCTGATCTGATGATGATGATGATGATGAT 794
 QY 786 CAAGCTGAGAAAGACTCTCCGCTGCTGGAATCTGCTGCTGCTGCTGCTGCTGCTGCTG 845
 DB 795 TGAAGTCAACATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 854
 QY 846 CTCTAAATACATCAATCCGCTGATGATGATGATGATGATGATGATGATGATGATGATGAT 905
 DB 855 TATGATCAACATCTTACTGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 914
 QY 906 ATCTAATCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 965
 DB 915 GAAATACCGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 974
 QY 966 CTCTTCAACCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1025
 DB 975 TGTGTAGTAAAGAACAAAGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1034
 QY 1026 AGAAAGCTTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1085
 DB 1035 AAGAGATCTTGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1094
 QY 1086 CAAGAATACGAGAACACCGACCTACTTGCACAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1145
 DB 1095 GAATATCAAGAAAGACGACGAGTA---TCACTAACAATGACAAATGAAATCTGACGAGCA 1151
 QY 1146 ATCTAGTGAAGAAATGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1190
 DB 1152 CAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1196

RESULT 5
 US-08-480-604A-25
 ; Sequence 25, Application US/08480604A
 ; Patent No. 5736139
 ;
 ; GENERAL INFORMATION:
 ; APPLICANT: KINK, JOHN A.
 ; APPLICANT: THALLEY, BRUCE S.
 ; APPLICANT: PADHYE, NISHA V.
 ; APPLICANT: FIRCA, JOSEPH R.
 ; APPLICANT: STAFFORD, DOUGLAS C.
 ; TITLE OF INVENTION: VACCINE AND ANTITOXIN FOR TREATMENT AND
 ; PREVENTION OF C. DIFFICILE DISEASE
 ; NUMBER OF SEQUENCES: 32
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: MEDLEN & CARROLL, LLP
 ; STREET: 220 MONTGOMERY STREET, SUITE 2200
 ; CITY: SAN FRANCISCO
 ; STATE: CALIFORNIA
 ; COUNTRY: UNITED STATES OF AMERICA
 ; ZIP: 94104
 ;
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patentin Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/480,604A
 ; FILING DATE: 07-JUN-1995
 ; CLASSIFICATION: 424
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 08/422,711
 ; FILING DATE: 14-APR-1995
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 08/405,496
 ; FILING DATE: 16-MAR-1995
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 08/329,154
 ; FILING DATE: 25-OCT-1994
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 08/161,907
 ; FILING DATE: 02-DEC-1993
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 07/985,321
 ; FILING DATE: 04-DEC-1992
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 07/429,791
 ; FILING DATE: 31-OCT-1989
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: INGOLIA, DIANE E.
 ; REGISTRATION NUMBER: 40,027
 ; REFERENCE/DOCKET NUMBER: OPHD-01763
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (415) 705-8410
 ; TELEFAX: (415) 397-8338
 ; INFORMATION FOR SEQ ID NO: 25:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 1402 base pairs
 ; TYPE: nucleic acid
 ; STRANDEDNESS: double
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: DNA (genomic)
 ; FEATURE:
 ; NAME/KEY: CDS
 ; LOCATION: 1..1386
 ;
 ; US-08-480-604A-25
 ;
 ; Query Match 19.6%; Score 263; DB 1; Length 1402;
 ; Best Local Similarity 53.9%; Pred. No. 2.6e-86;
 ; Matches 639; Conservative 0; Mismatches 525; Indels 21; Gaps 4;
 ;
 ; 15 CAACAATCAATTCGGAATCCTGACAAATATCATCTGGAACCTGCGTTACAAAGACAA 74


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OY 130 -GAACGTAATGACAGAACACAGTTCAAACTGACCTCTTCCGCTAACTCTAGATCCGTGT 188
Db 216 CGATCCCATGACAGAACATGATCCAGCTGTCAATCTGGAATCTTCCAAATGGAAGT 275
OY 189 TATCGAGATGACAGAACATCTTCAACCTCCGATTCCTGAGACTCTCTGTTCCCTCG 248
Db 276 TATCTGTAAGATGCTCTGCTATACAACTGTATGACGAAACCTTCTCCACTCTCTCG 335
OY 249 GATTGATCCCGAATATCAAGACAGCGGTATCCGAATATCACTCCACATGAATACAC 308
Db 336 GATCCGATCCCGAATATCTCACTCC-----ATCTCTGTAACAAATGAATATAC 386
OY 309 CATATCACTGATGATGAAATATCACTGCTGTTGGAAGATCTCCATCCCGGATACCGTAT 368
Db 387 CATATCACTGATGATGAAATATCACTGCTGTTGGAAGATCTCTGATCTGATGATGATG 446
OY 369 CATCTGAGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 428
Db 447 CATCTGAGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 506
OY 429 CCGTGAAGACATCTCTGATATCACTGATGATGATGATGATGATGATGATGATGATGAT 485
Db 507 GATGATCACTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 566
OY 486 CCTGAACATGCTTAAATCTATCACTGATGATGATGATGATGATGATGATGATGATGAT 545
Db 567 TCTGAATATCTCAAAATCTATCACTGATGATGATGATGATGATGATGATGATGATGAT 626
OY 546 CATCCGTAAGTATGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 605
Db 627 TCTGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 686
OY 606 TACCGAGTTCATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 665
Db 687 TCACCGCTCATCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 746
OY 666 TATCGAGACGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 725
Db 747 AATCAAAAGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 806
OY 726 TCCGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 785
Db 807 CTACCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 866
OY 786 CAACTGAAAGAAAGCTGCTCGGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTT 845
Db 867 TCACCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 926
OY 846 CTCTAAATATCACTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 905
Db 927 TATGATCACTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 986
OY 906 ATCTACTCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 965
Db 987 GAAATACCGGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1046
OY 966 CTCTTCAACCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1025
Db 1047 TGTGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1106
OY 1026 AGAAAAAGCTTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1085
Db 1107 AAGATCTTGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1166
OY 1086 CAAAGATATGACGACGACGACGACGACGACGACGACGACGACGACGACGACGACGACGACGAC 1145
Db 1167 GAAATCCAGAGACGACGACGACGACGACGACGACGACGACGACGACGACGACGACGACGACGAC 1223
OY 1146 ATCTACTGACGAAATGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1190
Db 1224 CAATGATACGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1268

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RESULT 7
US-08-915-136-25
; Sequence 25, Application US/08915136
; Patent No. 6230960
; GENERAL INFORMATION:
; APPLICANT: KINK, JOHN A.
; APPLICANT: THALLEY, BRUCE S.
; APPLICANT: PADHYE, NISHA V.
; APPLICANT: FIRCA, JOSEPH R.
; APPLICANT: STAFFORD, DOUGLAS C.
; TITLE OF INVENTION: VACCINE AND ANTITOXIN FOR TREATMENT AND
; TITLE OF SEQUENCES: 32
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL, LLP
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: Patent Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/915,136
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/480,604
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/405,496
; FILING DATE: 16-MAR-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/329,154
; FILING DATE: 25-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/161,907
; FILING DATE: 02-DEC-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/985,321
; FILING DATE: 04-DEC-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/429,791
; FILING DATE: 31-OCT-1989
; ATTORNEY/AGENT INFORMATION:
; NAME: INGOLIA, DIANE E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: OPFD-01763
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 397-8338
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1402 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 1..1386
; US-08-915-136-25
; Query Match 19.6% Score 263; DB 4; Length 1402;
; Best Local Similarity 53.9% Pred. No. 2.6e-66;
; Matches 639; Conservative 0; Mismatches 525; Indels 21; Gaps 4;
OY 15 CAAACAATACAAATTCGAAATCTGGAACAAATATCATCTGGAACCTGCTTACAAAGACAA 74

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Db 96 CACTGAATACATCAAGAACATCATACCTCCATCCTGACCTGGCTACGATCCAA 155
QY 75 CAATCGATGATCTGTCTGTTAGCGTAAAGTTGAAGTATACGACGGTGT----- 129
Db 156 TCACCTGATCGACGTGTCTGCTACGCTCCAAATCAACATCGGTCTTAAGTTACTT 215
QY 130 -GAATGAATGACACAGAACCACTGTAACCTCTTCCCTTAACCTTAAGTCCGT 188
Db 216 CGATCCGATCGACAGAAATCATCATCAGTGTTCATCTGGAATCTTCCAAATCGAAGT 275
QY 189 TACTCGAATCGAATCATCTATCTCCCTATCTCCGATCTCTGTTCTCTCTG 248
Db 276 TATCGGAAGATGCTATGCTATACACTCTGTACGAAACTCTCTCCCTCTCTG 335
QY 249 GATTCGATCCGAAATACAGACGCGTATCCAGATTCATCCATCCATGATAC 308
Db 336 GATCCGATCCGAAATACCTCACTC-----ATCTCTGGAACAAATGATAC 386
QY 309 CATCATCACTGATGATGAAGATTAATCTGGAAGATCTCCATCCCGGTAACCGTAT 368
Db 387 CATCATCACTGATGATGAAGATTAATCTGGAAGATTCATCCATCCATGATAC 446
QY 369 CATCTGACTCTGATGATTAATCAACGCTAAGAACCAATCTGATCTTCTGATACAT 428
Db 447 CATCTGACTCTGATGATTAATCAACGCTAAGAACCAATCTGATCTTCTGATACAT 506
QY 429 CCGTGAAGACATCTCTGAATACATCAATGCTGCTCTGTTACCATCCATCA--- 485
Db 507 GATGATCAACATCTCTGATCAATCAATGCTGCTGATCTGTTACCATCCATCAAC 566
QY 486 CCTGAACATCTCTGAATTAATCTCAATCAACGCTAAGAACCAATCTGATCTTCTGAT 545
Db 567 TCTGAATACATCCAAATCTCAATCAACGCTGATCAACGCTGATCAACGCTGCTCA 626
QY 546 CATCCGTAAGTATCTCTAAGCTGTAATCAATCTCTCAACGCTGATCAACGCTGAT 605
Db 627 TCTGAGTAACATCCGCTCTTAATCAATCAATGCTGATCAACGCTGATCAACGCT 686
QY 606 TACCAGTTCATCTGATGAATTAATCTCTCAATCTCAACGCTGATCAACGCTGAT 665
Db 687 TCAACGCTCAATCTGATGAATTAATCTCTCAATCTCAACGCTGATCAACGCTGAT 746
QY 666 TATCGAAGACGCTGATCAAGATCTCTGATCTCTCAACGCTGATCAACGCTGAT 725
Db 747 TATCGAAGACGCTGATCAAGATCTCTGATCTCTCAACGCTGATCAACGCTGAT 806
QY 726 TCCGCTGATGATCAACAGATTAATCTCTCAATCTCAACGCTGATCAACGCTGAT 785
Db 807 CTACCTGATGATCAACAGATTAATCTCTCAATCTCTCAACGCTGATCAACGCTGAT 866
QY 786 CAACTGAAGAACGCTCTCCGCTGTTGTAATCTCTCAACGCTGATCAACGCTGAT 845
Db 867 TCACTGATCAACGCTGATGATCTCTCAACGCTGATCAACGCTGATCAACGCTGAT 926
QY 846 CTTCTAATCAACGCTGATGATCTCTCAACGCTGATCAACGCTGATCAACGCTGAT 905
Db 927 TATGATCAACGCTGATGATCTCTCAACGCTGATCAACGCTGATCAACGCTGAT 986
QY 906 ATCTAATCTGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 965
Db 987 GAAATACGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1046
QY 966 CTTCTAATCAACGCTGATGATCTCTCAACGCTGATCAACGCTGATCAACGCTGAT 1025
Db 1047 TGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1106
QY 1026 AGAAGATCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1085
Db 1107 AAGATCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1166
QY 1086 CAAAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1145
Db 1167 GAAATCAAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1223

QY 1146 ATCTACTGACGAATCGGCTGATGATGATGATGATGATGATGATGATGATGAT 1190
Db 1224 CATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1268

RESULT 8
US-07-618-312A-3
Sequence 3, Application US/07618312A
Patent No. 5389540
GENERAL INFORMATION:
APPLICANT: Makolf Dr, Andrew J
APPLICANT: Romanos Dr, Michael A
APPLICANT: Clare Dr, Jeffrey J
APPLICANT: Fairweather Dr, Neil F
TITLE OF INVENTION: VACCINES
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: 14th Floor
STREET: 2200 Clarendon Boulevard,
CITY: Arlington,
STATE: Virginia
COUNTRY: U.S.A.
ZIP: 22201
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/618,312A
FILING DATE: 19910516
CLASSIFICATION: 424
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: GB 8926832.0
FILING DATE: 28-NOV-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: GB 9006097.1
FILING DATE: 17-MAR-1990
ATTORNEY/AGENT INFORMATION:
NAME: Crawford Mr, Arthur R
REGISTRATION NUMBER: 25,327
REFERENCE/DOCKET NUMBER: 510-51
TELECOMMUNICATION INFORMATION:
TELEPHONE: 0101 703 8750400
TELEFAX: 0101 703 5253468
TELEX: 200797 NIXN UR
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 1359 base pairs
TYPE: NUCLEIC ACID
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: cdna
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Clostridium tetani
FEATURE:
NAME/KEY: CDS
LOCATION: 1..1356
US-07-618-312A-3

Query Match 9.8%; Score 131.4; DB 1; Length 1359;
Best Local Similarity 47.6%; Pred. No. 2; Be-28;
Matches 633; Conservative 0; Mismatches 636; Indels 60; Gaps 6;

QY 40 AACATATCATCTGATCTGATCAAGACATCTGATGATCTGATCTGATCTGATCTGAT 99
Db 58 AAGTCTACATCTGATCTGATCTGATCTGATCTGATCTGATCTGATCTGATCTGAT 117
QY 100 GGTGCTAAGTGAAGTATGATGATGATGATGATGATGATGATGATGATGATGAT 159

US-08-280-228-3

Query Match	9.88;	Score 131.4;	DB 1;	Length 1359;
Best Local Similarity	47.68;	Pred. No. 2.8e-28;		
Matches 633;	Conservative	0;	Mismatches 636;	Indels 60;
				Gaps 6;

QY	40	AACAAATATCATCCGGAACCGCGGTTACAAAGCAACAACATCGATGCATTCGTGGTTAC	99
Db	58	AAGCTACACATCTCGAACTTGGACATCAACAACAAGATATATCTCCGACATCTCTGGTTCC	117
QY	100	GGTGTAAAGTTGAGATATACGACGGGTGTGAACTGAATGACAAGAACGTTCAACTG	159
Db	118	AACCTCTGTGTATCATCATATCCAGATGTCTAAATGTGGTGGCGGACATCAACGGCAAAAGCT	177
QY	160	ACCTCTCCCGGTAAAC-----TCTAAGATCCGGTGTACTGGAATGATGAAGACATCATC	210
Db	178	ATCCACCGGTAAACAACAAGATCTTGTGAAGTATCGTGCACAAAGCGCATGACATCCGA	237
QY	211	TTCACTTCGGTATTTCTCGAATTTCTCTGTTCCTTTCTTGATGTGTATCCGGAATCAAG	270
Db	238	TACACAGCAATGGTTCAACAACTCAACCGTTACCGTTCTGGCTGGCGGTCCGAAAGTTTCT	297
QY	271	AACACGGTATCCAGAAATTCATATCCACATGATGAATACACATCAATCAACGTGATGAAGAT	330
Db	298	GCTTCCACCTCGGAACAGTACGGCACATACGAGTACATCATCACTCATGAGAAATG	357
QY	331	AA-----CTGTGGTGGAAATCTCCATCCGCGGTAAACCGTATCATCTGG	375
Db	358	CACCTCCCTGTCCATCCGGCTCTGGTTGGTCTGTTCCTCGGAAGGTAAACAACCTGATCTGG	417
QY	376	ACCTGATGCATATCCAAAGGTAAAGCAAACTCGATATCTTCGATACATCAACATCCGTGA	435
Db	418	ACTGTGAAGACCTCCCGGGCGAAGTGTGTAGATACATTTCCGCGACCTGCCGGAACG	477
QY	436	GACATCTCTGAATATCATCAATCGCTGGTCTTCTGTTACCATCAG--CAATAACTGAAAC	492
Db	478	TTCAACCCGTAACCTGGCTCAACAAAGGGTTTCTATCACTATCACTAAGCATGATGTGCTCT	537
QY	453	AATCTTAAATCTTCAATCAACGGTAAACTGATGAATCTAATACGAAATCAACAAACATCCGT	552
Db	538	TCTGTAACTGTATCATCAACGGCGTTCTGATGGGCTTCGGTGAATCACTGGTCTGGGC	597
QY	553	GAACTTATCGCTAAGCGTGAATTCATCTTCAAACTGAGACGGTACATATGATCGTACCGAG	612
Db	598	GCTATCCGTGAGGACAACAACATCACTACTTAAAGCTGGACCGGTGCAACAACAACAACCG	657
QY	613	TTCACTCGAATGAATATCTTCCATCTCAACACGCAATGTCTCAATCCAAATATCCGA	672
Db	658	TACGTATTCATCAACAGTTCCGTATCTTCTGCAAGACACTGAAACCGGAAGAGATCCGA	717
QY	673	GAAAGGTACAAGATCCAGCTTATACGCCAATACCTGAAAGACTTGGGGTAAATCCGCTG	732
Db	718	AAACTGTATACCAAGTACCTGCTATCACTCCCGGTGACTCTGGGGTAAACCGCTG	777
QY	733	ATGTACAAACAAGATACATATATGTTCATATCTGTACAAAGAATCTTATCATCAACTG	792
Db	778	CGTTACGACACCAAAATATTAACGTGATCCCGGTACTTCTAGCTCTAAAGACGTGTAGCTG	837
QY	793	AAGAAAGACTCTCCGGTGTGGTAAATCTCTGACTGGTTCCAAAATCAACAACGAACTCTAA	852
Db	838	AAAAAATCACTACTGACTACATATGTACCTGACCAACGGCGGTCTACACTTAACGGTAAACTG	897
QY	853	TACATCAACATACCGGCACTGTACATGATGGTGAAGAAAGTTCAATCCGTGGCAAAATCTAC	912
Db	898	AACATCTACTACTGACAGCTGTGACAAACGGCGTGAATTCATCAACAAGCTCACTACATCCG	957
QY	913	TCTCAGTCATCAATGATGACATCTGTAGTAAAGAAAGACTACATCACTGACACTCTTC	972
Db	958	AACAACAATTCATCTTCTGTTAAATCTGTGATCTTCATCAAACTGTACGTTCTTAC	1017
QY	973	AACTGAAATGAAGAAATGGCGGTATATAC-----CTACAAAGTACTTCAAGAAAGAA	1028
Db	1018	AACAACAACAACAATCTGTTGGTATACCGGAAGACGGTAAACGCTTTCACAAACCTGGAC	1077

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QY 1027 GAAACCTTTCTCGGCTCCGACATCTGTGATTCGACGACACTCTCAACACACATCCAGATC 1086
Db 1078 AGAATTCTCGGTGTGGTATCAAAAGCTCCGGGATATCCCGCTGTACAAAAAATGCAAGT 1137
QY 1087 AAGAATATGACGACAAACCCGACCTACTCTTGCCAGCTGCTGTTCAGAAAGATGAGAA 1146
Db 1138 GTTAAATCTCGGTGACCTGAAACCACTCTCTGTTCCAGTGAAACCTGTACGACGCAAAAC 1197
QY 1147 TCTACTGACGAATATGGCTGTGATCCGATCCACCCGTTCTCTGCAATCTGTATCGTATTC 1206
Db 1198 GCTTCTC-----TGGGCTGGTGGTGTATCCCAACAGGTCAGATCGGTATAC 1242
QY 1207 GAGAAATACAAAGACTACTCTGTGATCAATGTCGACGTAAGAGATTAAGCAAA 1266
Db 1243 GACCCGACCGGTGACATCTGATTCGTTCTTAATCTGTACTTCAACCACTGAAAGCAAAA 1302
QY 1267 CCGTACACACTGAATCTGGGTGCAATTTGGCAGTTTCATCCCGAAAGACGAGTTGACC 1328
Db 1303 -----ATCCTGGGTTGGTGCAGTGTACTTGTTCGACGATGAAAGTTGTGACC 1350
QY 1327 GATTAAGTA 1335
Db 1351 AAGACTAA 1359

RESULT 10
US-08-480-604A-27
Sequence 27, Application US/08480604A
Patent No. 5736139
GENERAL INFORMATION:
APPLICANT: KINK, JOHN A.
APPLICANT: THALLEY, BRUCE S.
APPLICANT: RADHE, NISHA V.
APPLICANT: FIRCH, JOSEPH R.
APPLICANT: STAFFORD, DOUGLAS C.
TITLE OF INVENTION: VACCINE AND ANTITOXIN FOR TREATMENT AND
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSEE: MEDLEN & CARROLL, LLP
STREET: 220 MONTGOMERY STREET, SUITE 2200
CITY: SAN FRANCISCO
STATE: CALIFORNIA
COUNTRY: UNITED STATES OF AMERICA
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/480,604A
FILING DATE: 07-JUN-1995
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/422,711
FILING DATE: 14-APR-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/405,496
FILING DATE: 16-MAR-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/329,154
FILING DATE: 25-OCT-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/161,907
FILING DATE: 02-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/985,321
FILING DATE: 04-DEC-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/429,791
FILING DATE: 31-OCT-1989

```

ATTORNEY/AGENT INFORMATION:
 NAME: INGOLTA, DIANE E.
 REGISTRATION NUMBER: 40,027
 REFERENCE/DOCKET NUMBER: OPHD-01763
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 705-8410
 TELEFAX: (415) 397-8338
 INFORMATION FOR SEQ ID NO: 27:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 3891 base pairs
 TYPE: nucleic acid
 STRANDEDNESS: double
 TOPOLOGY: linear
 MOLECULE TYPE: DNA (genomic)
 FEATURE:
 NAME/KEY: CDS
 LOCATION: 1..3888
 US-08-480-604A-27

Query Match 9.2%; Score 123; DB 1; Length 3891;
 Best Local Similarity 50.2%; Pred. No. 1.3e-25;
 Matches 396; Conservative 0; Mismatches 375; Indels 18; Gaps 3;

QY 20 AATACAAATCGGAATCTGACACATATCTCTGAACTCGCTTCAAGACAAACATC 79
 DB 2603 AATATATTAGAAATATTATTAATCTCTATATTGAATTAAGATATGAAGTAATCAT 2662
 QY 80 TGATGATCTGTCTGTAGCGTGTAA-----GTGGAAGTATGACGAGTGTGAAC 133
 DB 2663 TAATAGACTTATCTAGTAGCATCAAAAATAATATGTTAGTAAGTAAGTAATTTGATC 2722
 QY 134 TGAATGACAGAACCACTTCAAACTGACCTCTCCGCTAATCTAAGATCCGCTTAC 193
 DB 2723 CAATAGATAAAATCAATCAATATTATTAGAAATGTAATAATTTGAGTAATTT 2782
 QY 194 AGAATCGAAGATCATCTCTCACTCCGATTCCTGACCTCTCTGTTCTCTCGATTC 253
 DB 2783 TAAAAAAGCTATTGTATATATATAGTATGTAAGAAATTTTACTAGCTTTTGGATTA 2842
 QY 254 GTATCCGAAATACAAAGACGGTATCCGAATTACATCCAAATGATACCATCA 313
 DB 2843 GAATTCCTAAGTATTATTAAGATAAGTAAAT-----AATGAAATATACATA 2893
 QY 314 TCAACTGCATGAAGATACTCTGTTGGAAGATCTCCATCCGCGGAACCGTATCATCT 373
 DB 2894 TAAATGTATGAAATATATTCAGATGGAAGATCACTAATTATGGGAATATCT 2953
 QY 374 GGAATCTGATGATATCAAGCGTAAAGCAAAATCTGATTCCTGGAATACACATCCGTG 433
 DB 2954 GGACTTTACAGGATCTCAGGAATAAAGAAAGAGTATTTTAAATACAGTCAATGA 3013
 QY 434 AAGACATCTGATATACATCAATCGTGGTTCCTGTTACCATCACAATAA---CCGA 490
 DB 3014 TTAATATTCAGATTAATTAACAGATGATTTTGTACTATACACTAATAATAGTTAA 3073
 QY 491 ACAATGCTAAATCTACATCAACGCTAAGTGAATCAATCAACGATCAAGACATCC 550
 DB 3074 AATACTCTAAATTTATATAATGGAAGATTAATAGATCAAAACCAATTTCAATTTAG 3133
 QY 551 GTGAAGTATCGCTAAGCGTGAATCAATCTTCAACCTGACGGGTGACATCGATACCC 610
 DB 3134 GTAAATTCATGCTATGTAATATATATGTTTAAATTAATGATGTTAGATACACATA 3193
 QY 611 AGTTCATCTGATGAAATCTCTCAATCTTCAACACCGAATGTCATCTCAATCAATG 670
 DB 3194 GATATATTTGATTAATATTTTATCTTTTGTATAGGAATTAATGAAAAAGAAATGA 3253
 QY 671 AAGAAAGGTACAAATCCAGTCTTACTCCGAATCCGGAAGACTTCTGGGGTAATCCGC 730
 DB 3254 AAGATTATATGATTAATCAAAATTCAGTATTTTAAAGACTTTTGGGGGATTAAT 3313
 QY 731 TGATGATCAAAAGAAATCTATATGTTCAATGCTGTTAACAAGAACTCTTACATCAAC 790

DB 3314 TACAAATGATAAACCATACTATATGTTAAATTTATATGATCCAAATAATATGCGATG 3373
 QY 791 TGAAGAAAG 799
 DB 3374 TAAATAATG 3382

RESULT 11
 US-08-405-496A-27
 Sequence 27, Application US/08405496A
 Patent No. 591865
 GENERAL INFORMATION:
 APPLICANT: WILLIAMS, JAMES A.
 TITLE OF INVENTION: VACCINE FOR CLOSTRIDIUM BOTULINUM
 TITLE OF INVENTION: NEUROTOXIN
 NUMBER OF SEQUENCES: 30
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: MEDLEN & CARROLL, LLP
 STREET: 220 MONTGOMERY STREET, SUITE 2200
 CITY: SAN FRANCISCO
 STATE: CALIFORNIA
 COUNTRY: USA
 ZIP: 94104
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patent Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/405,496A
 FILING DATE: 16-MAR-1995
 CLASSIFICATION: 424
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/329,154
 FILING DATE: 25-OCT-1994
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/161,907
 FILING DATE: 02-DEC-1993
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/985,321
 FILING DATE: 04-DEC-1992
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/429,791
 FILING DATE: 31-OCT-1989
 ATTORNEY/AGENT INFORMATION:
 NAME: INGOLTA, DIANE E.
 REGISTRATION NUMBER: 40,027
 REFERENCE/DOCKET NUMBER: OPHD-01308
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 705-8410
 TELEFAX: (415) 397-8338
 INFORMATION FOR SEQ ID NO: 27:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 3891 base pairs
 TYPE: nucleic acid
 STRANDEDNESS: double
 TOPOLOGY: linear
 MOLECULE TYPE: DNA (genomic)
 FEATURE:
 NAME/KEY: CDS
 LOCATION: 1..3888
 US-08-405-496A-27

Query Match 9.2%; Score 123; DB 2; Length 3891;
 Best Local Similarity 50.2%; Pred. No. 1.3e-25;
 Matches 396; Conservative 0; Mismatches 375; Indels 18; Gaps 3;

QY 20 AATACAAATCGGAATCTGACACATATCTCTGAACTCGCTTCAAGACAAACATC 79
 DB 2603 AATATATTAGAAATATTATTAATCTCTATATTGAATTAAGATATGAAGTAATCAT 2662
 QY 80 TGATGATCTGTCTGTAGCGTGTAA-----GTGGAAGTATGACGAGTGTGAAC 133

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DB 2663 TAAATGACTTATCTAGTATGATCAAAATAATTTGTAAGTAATTTTCATC 2722
QY 134 TGAATGACAGAACAGAGTTCATCAAGCTCTCCGCTAAGTCCGTTACTC 193
DB 2723 CAATATATATAATCAATATTAATTTGAAGTAGTAATTTGAGTAATTT 2782
QY 194 AGATGAGAACATCACTCTCACTCCGATTCCTGAGTCTCCTGCTGAGATC 253
DB 2783 TAAATAATGCTATGTATTAATTAATGATGAAAAATTTAGTACTGCTTTGGATTA 2842
QY 254 GTATCCGAAATCAAGAACAGAGTATCCAGATTTACATCCAGATTAACACCA 313
DB 2843 GAATTCCTAAGTATTTTAAGATTAAGCTAAAT-----AATGAATATCAATAA 2893
QY 314 TCAATGATGAAGATTAAGTCTGTTGGAATATCTCCATCCGGGTACCGTATCCT 373
DB 2894 TAAATGTATGGAATAATTCAGATGGAAGTATCACTTAATTTATGTTGAATATCT 2953
QY 374 GGAATGATGATCAAGGTAAGACCAATCTGTATCTTCGATACACATCAATCCGTG 433
DB 2954 GGAATTTACAGATCTACAGAAATTAACAAAGAGTAGTTTAAATACAGTCAATGA 3013
QY 434 AAGACATCTGTGAATACATCAATCGTGTCTTGTGTTACATCCCAATAA---CCTGA 490
DB 3014 TTAATATATCAGATTAATTAACAGATGATTTTGTATCACTATATATATAGATTAA 3073
QY 491 ACATGCTAAATCTCAATCAACAGGTAACGTAATCTGATATACGACATCAAGACATCC 550
DB 3074 ATAACTTAAATTTATTAATTAAGAAATTAATAGATTAATAAACAATTTCAATTTAG 3133
QY 551 GTGAAGTTATCGTAAAGGTGAATATCATCTTCAACTGAGCGGTGATCATCGTATCC 610
DB 3134 GTATATTTACAGTAAATTAATATATATATATATATATATATATATATATATATAT 3193
QY 611 AGTTCATCTGATGAAGTAATCTCTCATCTTCAACAGGATCTGCTGCTCAATATCG 670
DB 3194 GATATATTTGATTAATTTATTAATCTTTTATAGATTAAGATTAATTAAGAAAGAA 3253
QY 671 AAGAAGCGTACCAAGATCACTCTTACTCCGAAATCTGGAAGACTTCTGGGTATCCGC 730
DB 3254 AAGATTTATATGATTAATCAATCAAAATTCAGATTTTAAAGACTTTTGGGTGATTA 3313
QY 731 TGAATGACAAAGAAATTAATATATATGTTCAATGCTGTTAACAAGAACTTCTTCAACA 790
DB 3314 TACATATGATTAACCAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTA 3373
QY 791 TGAAGAAG 799
DB 3374 TAAATTAATG 3382

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RESULT 12
US-08-915-136-27
; Sequence 27, Application US/08915136
; Patent No. 6290960
; GENERAL INFORMATION:
; APPLICANT: KINK, JOHN A.
; APPLICANT: THALLEY, BRUCE S.
; APPLICANT: PADHYE, NISHA V.
; APPLICANT: FIRCA, JOSEPH R.
; APPLICANT: STAFFORD, DOUGLAS C.
; TITLE OF INVENTION: VACCINE AND ANTITOXIN FOR TREATMENT AND
; TITLE OF INVENTION: PREVENTION OF C. DIFFICILE DISEASE
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: MEDLEN & CARROLL, LLP
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk

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; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/915,136
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/480,604
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/405,496
; FILING DATE: 16-MAR-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/329,154
; FILING DATE: 25-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/161,907
; FILING DATE: 02-DEC-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/985,321
; FILING DATE: 04-DEC-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/429,791
; FILING DATE: 31-OCT-1989
; ATTORNEY/AGENT INFORMATION:
; NAME: INGOLIA, DIANE E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: OPBD-01763
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 27:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3891 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 1..3888
;
; US-08-915-136-27
;
; Query Match 9.2%; Score 123; DB 4; Length 3891;
; Best Local Similarity 50.2%; Pred. No. 1,3e-25;
; Matches 396; Conservative 0; Mismatches 375; Indels 18; Gaps 3;
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QY 20 AATACAAATCCGAATCTGACAAATATCAATCTCTGAACTCGGTACAAAGACAAATC 79
DB 2603 AATATATTAGAAATATATTATTAATCTCTATTTAGATTAATTAATTAATTAATTA 2662
QY 80 TGATCGATCTGTCTGTAGCGTGTAA-----GTGAAGTATACGAGGTGTGAAC 133
DB 2663 TAAATGACTTATCTAGTATGACATCAAAATAATTTGATAGTAAGTAATTTGATC 2722
QY 134 TGAATGACAGAACAGAGTTCATCAAGCTCTCCGCTAAGTCCGTTACTC 193
DB 2723 CAATATATATAATCAATATTAATTTGAAGTAGTAATTTGAGTAATTT 2782
QY 194 AGATGAGAACATCACTCTCACTCCGATTCCTGAGTCTCCTGAGATC 253
DB 2783 TAAATAATGCTATGTATTAATTAATGATGAAAAATTTAGTACTGCTTTGGATTA 2842
QY 254 GTATCCGAAATCAAGAACAGAGTATCCAGATTTACATCCAGATTAACACCA 313
DB 2843 GAATTCCTAAGTATTTTAAGATTAAGCTAAAT-----AATGAATATCAATAA 2893
QY 314 TCAATGATGAAGATTAAGTCTGTTGGAATATCTCCATCCGGGTACCGTATCCT 373
DB 2894 TAAATGTATGGAATAATTCAGATGGAAGTATCACTTAATTTATGTTGAATATCT 2953
QY 374 GGAATGATGATCAAGGTAAGACCAATCTGTATCTTCGATACACATCAATCCGTG 433

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; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
JS-08-928-361B-4

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Query Match      5.3%  Score 70.6; DB 3; Length 5163;
Best Local Similarity 44.3%; Pred. No. 2.1e-10;
Matches 286; Conservative 0; Mismatches 359; Indels 0; Gaps 0;

QY 269 AGAAGCGGATATCAGAAATACATACCAATGAATACACCATCATCACTGCATGAAGA 328
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 574 ACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACA 633
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
QY 329 ATAACCTCTGGTGGAAATCTCCATCCGCGGTAAACCGTATCTGGAATCTGATA 388
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 634 ACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACA 693
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
QY 389 TCAACGGTAAAGCAAAATCTGTATTCTTGAATACACATCCGTTGAAGCATCTGTAAT 448
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 694 ACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACA 753
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
QY 449 ACATCAATCGGTGGTCTTCTGTTACCATCAACATCAACCTGAACATGCTAAATCTTACA 508
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 754 ACTACTACTACTACTACTACTACTACTACTACTACTACTACTACTACTACTACTACT 813
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
QY 509 TCAACGGTAAATGGAATCTTAATACCGAGATCAAGACATCCGTTGAAGTTATCGTAAAG 568
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 814 ACAACTTACCAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACA 873
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
QY 569 GTGAATCATCTTCAAACTGGACGCGGTGACATCGTACCCAGTTTCATCTGGATGAAT 628
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 874 ACTACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACA 933
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
QY 629 ACTTCTCATCTTCAACACGAACTGCTCAGTCCATATCGAAGACGGTACAGATCC 688
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 934 ACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACA 993
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
QY 689 AGTCTTACCGAATACCTGAAAGACTTCTGGGGTAAATCCGCTGATGTACAAAGAAT 748
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 994 ACAACTTACAACCTACCAAGAAACCAACAACCTACTACTACTACTACTACTACTACT 1053
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
QY 749 ACTATATGTCAATGCTGTAACAAGAACTCTTACATCAAACTGAAGAAGACTCTCCGG 808
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1054 ACTACTTACCACACACACACACACACACACACACACACACACACACACACACAC 1113
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QY 809 TTGGTGAATCTGACTGTTTCCAAATACAAACAGAACTCTAAATACATCAACTACCGGG 868
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Db 1114 ACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACA 1173
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
QY 869 ACTGTGATCATCGGTGAAAGTTTCATCTCCGTCGCAATCTAACT 913
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1174 ACAAGAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACA 1218
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RESULT 15

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US-08-700-651-2
; Sequence 2, Application US/08700651B
; Patent No. 6015882
; GENERAL INFORMATION:
; APPLICANT: PETERSEN, CAROLYN
; APPLICANT: LEECH, JAMES
; APPLICANT: NELSON, RICHARD, C.
; APPLICANT: GUT, JIRI
; TITLE OF INVENTION: VACCINES, ANTIBODIES, PROTEINS, GLYCOPROTEINS, DNAS AND RNAS
; TITLE OF INVENTION: FOR PROPHYLAXIS AND TREATMENT OF Cryptosporidium parvum
; FILE REFERENCE: 480.19-4(HV)
; CURRENT APPLICATION NUMBER: US/08/700, 651B
; CURRENT FILING DATE: 1997-08-14
; EARLIER APPLICATION NUMBER: 08/415,751
; EARLIER FILING DATE: 1995-04-03
; NUMBER OF SEQ ID NOS: 15

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; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 5318
; TYPE: DNA
; ORGANISM: Cryptosporidium parvum
US-08-700-651-2

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Query Match      5.3%  Score 70.6; DB 3; Length 5318;
Best Local Similarity 44.3%; Pred. No. 2.1e-10;
Matches 286; Conservative 0; Mismatches 359; Indels 0; Gaps 0;

QY 269 AGAAGCGGATATCAGAAATACATACCAATGAATACACCATCATCACTGCATGAAGA 328
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 575 ACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACA 634
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
QY 329 ATAACCTCTGGTGGAAATCTCCATCCGCGGTAAACCGTATCTGGAATCTGATA 388
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 635 ACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACA 694
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
QY 389 TCAACGGTAAAGCAAAATCTGTATTCTTGAATACACATCCGTTGAAGCATCTGTAAT 448
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 695 ACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACA 754
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
QY 449 ACATCAATCGGTGGTCTTCTGTTACCATCAACATCAACCTGAACATGCTAAATCTTACA 508
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 755 ACTACTACTACTACTACTACTACTACTACTACTACTACTACTACTACTACTACTACT 814
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
QY 509 TCAACGGTAAATGGAATCTTAATACCGAGATCAAGACATCCGTTGAAGTTATCGTAAAG 568
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 815 ACAACTTACAACCTACCAAGAAACCAACAACCTACTACTACTACTACTACTACTACT 874
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QY 569 GTGAATCATCTTCAAACTGGACGCGGTGACATCGTACCCAGTTTCATCTGGATGAAT 628
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 875 ACTACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACA 934
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
QY 629 ACTTCTCATCTTCAACACGAACTGCTCAGTCCATATCGAAGACGGTACAGATCC 688
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 935 ACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACA 994
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
QY 689 AGTCTTACCGAATACCTGAAAGACTTCTGGGGTAAATCCGCTGATGTACAAAGAAT 748
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 995 ACAACTTACAACCTACCAAGAAACCAACAACCTACTACTACTACTACTACTACTACT 1054
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
QY 749 ACTATATGTCAATGCTGTAACAAGAACTCTTACATCAAACTGAAGAAGACTCTCCGG 808
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1055 ACTACTTACCACACACACACACACACACACACACACACACACACACACACACAC 1114
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
QY 809 TTGGTGAATCTGACTGTTTCCAAATACAAACAGAACTCTAAATACATCAACTACCGGG 868
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1115 ACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACA 1174
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
QY 869 ACTGTGATCATCGGTGAAAGTTTCATCTCCGTCGCAATCTAACT 913
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1175 ACCAGAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACA 1219
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Search completed: November 1, 2002, 07:20:33
Job time : 84 secs

Db	121	GACGCTGTGAACTGAATGACAAGAACAGTTCAACTGACCTCTTCCTCCGCTAACTCTAAG	180
Qy	181	ATCCGTTGTTACTCAGAATCAGAAGACATCATCTTCAACTCCGTTATCTCTGGACCTCTCTGTT	240
Db	181	ATCCGTTGTTACTCAGAATCAGAAGACATCATCTTCAACTCCGTTATCTCTGGACCTCTCTGTT	240
Qy	241	TCTTCTCGATTCTGTTATCCCGAAATACAAGACGAGGTATCCAGAAATACATCCACAAAT	300
Db	241	TCTTCTCGATTCTGTTATCCCGAAATACAAGACGAGGTATCCAGAAATACATCCACAAAT	300
Qy	301	GAATACACCATCATCAACTGCATGAAGAATAACTCTGTTGGAAGATCTCCATCCGCGGT	360
Db	301	GAATACACCATCATCAACTGCATGAAGAATAACTCTGTTGGAAGATCTCCATCCGCGGT	360
Qy	361	AACCGTATCATCTGACCTCTGATCGATATCAACGGTAAGACCAAAATCTGTATTCTTCGAA	420
Db	361	AACCGTATCATCTGACCTCTGATCGATATCAACGGTAAGACCAAAATCTGTATTCTTCGAA	420
Qy	421	TACAACATCCGTTGAAGACATCTCTGAATACATCAATCGCTGGTTCTTGGTTACCAATCAC	480
Db	421	TACAACATCCGTTGAAGACATCTCTGAATACATCAATCGCTGGTTCTTGGTTACCAATCAC	480
Qy	481	AATPAACCTGAACAATGCTAAATCTACATCAACGGTAAACTTCCACTCTTCAACACCGAATCT	540
Db	481	AATPAACCTGAACAATGCTAAATCTACATCAACGGTAAACTTCCACTCTTCAACACCGAATCT	540
Qy	541	AAAGACATCCGTTGAAGTTATCGCTAACCGGTGAATATCATCTTTCAACTGACGGTGACATC	600
Db	541	AAAGACATCCGTTGAAGTTATCGCTAACCGGTGAATATCATCTTTCAACTGACGGTGACATC	600
Qy	601	GATCGTACCCAGTTCACTGGATGAATACTTCTCCACTCTTCAACACCGAATCTGTTCTCAG	660
Db	601	GATCGTACCCAGTTCACTGGATGAATACTTCTCCACTCTTCAACACCGAATCTGTTCTCAG	660
Qy	661	TCCAAATATCGAAGACGGTACAAGATCCAGTCTTACTCCGAAATACCTTGAAGACTTCTCG	720
Db	661	TCCAAATATCGAAGACGGTACAAGATCCAGTCTTACTCCGAAATACCTTGAAGACTTCTCG	720
Qy	721	GGTAATCCGCTGATGTACAACAAGAAATACTATATGTTCAATGCTGTGAACAAGAACTCT	780
Db	721	GGTAATCCGCTGATGTACAACAAGAAATACTATATGTTCAATGCTGTGAACAAGAACTCT	780
Qy	781	TACATCAAACTGAAGAAGACTCTCCGTTGGTGAATTCCTGCTGCTGCTTCCAATACAAC	840
Db	781	TACATCAAACTGAAGAAGACTCTCCGTTGGTGAATTCCTGCTGCTGCTTCCAATACAAC	840
Qy	841	CAGAACTCTAAATACATCAACTACCGGACCTGTACATCGGTGAAAAGTTTCATCCCGT	900
Db	841	CAGAACTCTAAATACATCAACTACCGGACCTGTACATCGGTGAAAAGTTTCATCCCGT	900
Qy	901	CGCAAACTCAACTCTCAGTCCATCAATGATGACATCGTACGTAAGAGACTACATCTAC	960
Db	901	CGCAAACTCAACTCTCAGTCCATCAATGATGACATCGTACGTAAGAGACTACATCTAC	960
Qy	961	CTGGACTCTTCAACCTGTAATCAGGAATGGCGTGTATACACTACAAGTACTTCAAGAAA	1020
Db	961	CTGGACTCTTCAACCTGTAATCAGGAATGGCGTGTATACACTACAAGTACTTCAAGAAA	1020
Qy	1021	GAAGAGAAAAGCTTTTCTGGCTCCGATCTCTGATTCGGAGGACTCTACAACACCATC	1080
Db	1021	GAAGAGAAAAGCTTTTCTGGCTCCGATCTCTGATTCGGAGGACTCTACAACACCATC	1080
Qy	1081	CAGATCAAGAATAACGACGAACACCGGACCTACTCTTGCCAGCTGCTGTTCAAGAAAGAT	1140
Db	1081	CAGATCAAGAATAACGACGAACACCGGACCTACTCTTGCCAGCTGCTGTTCAAGAAAGAT	1140
Qy	1141	GAAGAACTACTGACGAAATCGGTCTGATCTGGATTCGACCGTTTCTACGAATCTGGTATC	1200
Db	1141	GAAGAACTACTGACGAAATCGGTCTGATCTGGATTCGACCGTTTCTACGAATCTGGTATC	1200
Qy	1201	GTATTCGAAGAAATACAAGACTACTTCTGCATCTCCAAATGGTACTCAAGGAAGTTAAA	1260
Db	1201	GTATTCGAAGAAATACAAGACTACTTCTGCATCTCCAAATGGTACTCAAGGAAGTTAAA	1260

[illegible]

Query Match	54.9%	Score 736;	DB 12;	Length 3876;
Best Local Similarity	72.2%;	Pred. No. 3.5e-199;		
Matches 955;	Conservative 1;	Mismatches 366;	Indels 0;	Gaps
QY	10	ATGGGCAACAAATACAAATTCGGAAATCCTCGAACRAATATCATCCTGAAACCTCGGTACAAA	69	
Db	2554	ATGTTTAAATAATAAATAGCGAAATTTTAAATAATATATCTTAAATTTAAGATATAAG	2613	
QY	70	GACAACTCTGATCGATCTGCTCGTTCACGGTGCTAAAGTTGAAGTATACGACGGTGT	129	
Db	2614	GATAATAATTTAATAGATTTATCAGGATATGGGCAAGGTAGAGGTATATGATGAGTC	2673	
QY	130	GAACTGAATGCAAGAAGACAGTTCAAACTGACCTCTCCGCTAACTCTAAAGATCCGTGTT	189	
Db	2674	GAGCTTAATGATATAAAATCAATTTAAATTAATCTAGCTTCAGCAAAATAGTAAGATTAGAGTG	2733	
QY	190	ACTCGAATCAGAAACATCATCTTTCAACTCCGCTATTCCTCGGACTCTCTGTTTCCCTCTGG	249	
Db	2734	ACTCAAAATCAGAAATATCATATTTAATAGTGTGTTCCCTGATTTAGCGTTAGCTTTGG	2793	
QY	250	ATTCTGATCCCGAAATPACAAAGACGGTATCCAGATTTACATCCACAAATGAATACACC	309	
Db	2794	ATAAGAATACCTAAATATAGAATGATGATATACAAAATATTATTCAATTAAGATATACA	2853	
QY	310	ATCATCAACTGCAATGAAGAATAACCTCTGGTTGGGAAGATCTCCATCCGCGGTAACCGTATC	369	
Db	2854	ATAATTAATGTATGAAAATAATTCGGGCTGGAATAATCTATTAGGGGTAATAGGATA	2913	
QY	370	ATCTGGAATCTGATCGATATCAACGGTAGACCAAAATCTGTAATCTCGAATACAAACATC	429	
Db	2914	ATATGGAATTTAATGATATAATGAAGAAAACCAAAATCGGTATTTTTTGAATATACATA	2973	
QY	430	CGTGAAGACATCTCTGAAATACATCAATCTCGCTGGTTCTTGTTTACCATCACCATAAACCTG	489	
Db	2974	AGAGAAGATATATCAGAGTATATAAATAGATGGTTTTTTTGTAACTATTACTAATAATTTTG	3038	
QY	490	AACAATGCTAAATCTACATCAACGGTAACTGGATCTAATACCGACATCAAGACATC	549	
Db	3034	ATAAACGCTAAATTTATATTAATGTGTAGCTAGAAATCAAAATACAGATATTAAAGATATA	3099	
QY	550	CGTGAAGTTATCGCTAACGGTGAATTCATCTTCAAACCTGGACGGTGACATCGATCGTACC	609	
Db	3094	AGAGAAGTTATTCGTAAATGGTGAATAAATATTAAATTAATAGTGGTGAATAGATAGAACA	3158	

610 CAGTTCATCTGGATGAATACTTCTCCATCTTCAACACCGAAGTCTCTCAGTCCCAATATC 669
 3154 CAATTTATTTGGATGAATACTTCTCAGTATTTTAAATAGCGAATTAAGTCAATCAATATTT 3213
 670 GAAGAAGGATACAGATCCAGTCTTCTACTCCGATACCTTGAAGACATCTTGGGGTAAATCCG 729
 3214 GAAGAAGATATAAATTCATCATATATAGGGAATATTTAAAGATTTTGGGGAAATCTCT 3273
 730 CTGATGTACAAAGAAATACTATATATCTTCAATCTGGTAAACAGAACTCTTACATCAAA 789
 3274 TTAATGTAGATTAAGATATATATCTTAAATCGGGGAATTAATAATTCATATATAA 3333
 790 CTGAAGAAGACTCTCCGGTGGTGAATCTCTGACTCGTTCCTCAATACACAGAACTCT 849
 3334 CTAAGAAGATTCACCTGTAGGTGAATTTTAAACAGTACGAATATATCAAAATCTCT 3393
 850 AAATACATCAACTACCGGACCTGTACATCGGTGAAAGTTCATCATCGTCCCAATCT 909
 3394 AAATATATAAATATAGAGATTTATATATTTGGGAAATATTTATTAAGAAGAAATCA 3453
 910 AACTCTAGTCCATCAATGATGACATCGTACGTAAAGAGACTACATCTACCTGGACTTC 969
 3454 AAATCTCAATCTATAAATGATGATATATAGTAAAGAGAGATTTATATCTAGATTTT 3513
 970 TTCAACCTGAATCAGGATGCGGTATACACCTTACACCTTCAAGTACTTCAAGAAAGAGAA 1029
 3514 TTTAATTTAAATCAGAGATGAGATATATACCTATTAATATTTTAAAGAAGAGAGAA 3573
 1030 AAGCTTTTCCGGTCCGATCTGTATCCGAGCAACTCTACACACCACTTACAGATCAAA 1089
 3574 AAATGTTTTAGCTCTCTATAAGTGAATCTCTGATGAGTTTGAATATCTATACAAATAAA 3633
 1090 GAATCAGGACACCGACCTACTCTTGCAGCTGCTTCAAGAAAGATGAAGATCT 1149
 3634 GAATATAGATATTTTGTATAGTAAATGGTATTAAGAGAGTGAAGAAAGT 3693
 1150 ACTGACGAATCGTCTGATCGATCCACCGTTTACCAAGTCTTACGATCTGATTCGAA 1209
 3694 ACTGATGAGATAGGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 3753
 1210 GAATCAAGACTACTTCTGATCTCCAAATGGTACCTGAGGAGGTTTAAACCAACCG 1269
 3754 GAGTATAAGATATTTTGTATAGTAAATGGTATTAAGAGAGTGAAGAGGTTAAAGAGAA 3813
 1270 TACAACCTGAACTGGTGGTGAATGGCAGTTCATCCGAAAGAGAGGTTGGACCGAA 1329
 3814 TATAATTTAAATGGGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 3873
 1330 TA 1331
 3874 TA 3875

RESULT 3
 US-10-051-952-2
 ; Sequence 2, Application US/10051952
 ; Patent No. US20020107195A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Walker, Patricia
 ; TITLE OF INVENTION: Methods of Administering Botulinum Toxin
 ; FILE REFERENCE: 2933CIP
 ; CURRENT APPLICATION NUMBER: US/10/051,952
 ; CURRENT FILING DATE: 2002-01-17
 ; PRIOR APPLICATION NUMBER: 09/730,237
 ; PRIOR FILING DATE: 2000-12-05
 ; NUMBER OF SEQ ID NOS: 12
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 2
 ; LENGTH: 3876
 ; TYPE: DNA
 ; ORGANISM: botulinum toxin
 ; US-10-051-952-2

Query Match 49.0%; Score 657; DB 12; Length 3876;
 Best Local Similarity 68.4%; Pred. No. 9.8e-177;
 Matches 909; Conservative 0; Mismatches 420; Indels 0; Gaps 0;
 QY 3 ATTCACGATGGCCAAACAAATACAAATCCGAAATCCCTGAACAATATCATCTCTGAACCTGG 62
 DB 2547 AATAAAATATTTAATAAAATATATATAGCGAAATTTTAAATAATATTTATCTTAAATTAAG 2606
 QY 53 TTACAAAGACAACAATCTGATCGATCTGTCTGGTTCAGGTGCTAAAGTTGAAGTATACGA 122
 DB 2607 ATATAGAGATAAATTAATTAATAGATTTATCAGGATATGGACAAAGGTAGAGTATATGA 2666
 QY 123 CGGTGTTGAAGTGAATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 182
 DB 2667 TGGGTCAAGCTTAAATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2726
 QY 183 CCGTGTACTCAGAAATCAGAAATCATCTTCAACTCCGATATCTCTGACTTCTCTCTTTC 242
 DB 2727 TAGAGTCACICAAATCAGAAATATATATTAATTAATAGTATGTTCTCTGATTTAGCGTTAG 2786
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 QY 363 CCGTATCATCTGGACTCTGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 422
 DB 2907 TAGGATATATGAGACCTTAATTTGATGATGATGATGATGATGATGATGATGATGATGAT 2966
 QY 423 CAACATCCGTGACACATCTCTGATGATGATGATGATGATGATGATGATGATGATGATGAT 482
 DB 2967 TAACATAGAGAGATATATCAGAGTATATTAATAGATGATGATGATGATGATGATGAT 3026
 QY 483 TAACCTGAACAAATGCTTAAATCTACATCAAGCTGAAGTGAATCTAAATACCGACATCA 542
 DB 3027 TAATTTGGATATGCTTAAATTTTATTAATGACGCTTGAATCAAAATGATGATGATGAT 3086
 QY 543 AGACATCCGTGAAGTTATGCTGAATGATGATGATGATGATGATGATGATGATGATGATGAT 602
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 QY 663 CAATATCGAAGACGGTACAAAGATCCAGTCTTACTCCGAAATACCTGAAAGACTTCTGGGG 722
 DB 3207 AATATATAGAGATATATTAATGATGATGATGATGATGATGATGATGATGATGATGAT 3266
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 QY 783 CATCAAACTGAGAAAGACTCTCCGTTGGTGAATCTGACTGCTTCCAAATACAAACCA 842
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 DB 3387 GAATTCCAATATATAAATTTATAGAAATTTATATATTGGAGAAATTTTATTAAGAAG 3446
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 DB 3447 AGAGTCAAAATCTCAATCTTAATGATGATGATGATGATGATGATGATGATGATGATGAT 3506
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 DB 3507 AGATTTGGTACTTCCATGAGAGAGTGGAGAGTATGCTCTATTAATATTTTAAAGGAACA 3566


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Db 1328 TCACGAGGGTGGACCA 1346
RESULT 5
US-09-350-756-1
; Sequence 1, Application US/09350756
; Patent No. US20020034521A1
; GENERAL INFORMATION:
; APPLICANT: U.S. Army Medical Research Institute for Infectious Diseases
; APPLICANT: John S. Lee
; APPLICANT: Peter Pushko
; APPLICANT: Michael D. Parker
; APPLICANT: Jonathan F. Smith
; APPLICANT: Mark T. Dertzbaugh
; APPLICANT: Leonard Smith
; TITLE OF INVENTION: Botulinum Neurotoxin Vaccine
; FILE REFERENCE: 003/124/SAP RIID 98-21
; CURRENT APPLICATION NUMBER: US/09/350,756
; EARLIER FILING DATE: 1998-07-09
; EARLIER APPLICATION NUMBER: US 60/092,416
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: Apple Macintosh Microsoft Word 6.0
; SEQ ID NO 1
; LENGTH: 1338
; TYPE: DNA
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: /note="synthetic sequence encoding botulinum neurotoxin"
US-09-350-756-1
Query Match 19.6%; Score 263; DB 10; Length 1338;
Best Local Similarity 53.9%; Pred. No. 5.3e-65;
Matches 639; Conservative 0; Mismatches 525; Indels 21; Gaps 4;
QY 15 CAACAATCAATTCGGAATCCTGAACAATATCATCTGAACTGCGTTTACAAGCAA 74
Db 32 CACTGAATCATCAAGACATCATCAATACCTCCATCTGAACTGCGCTACGAATCAA 91
QY 75 CAATCTGATCGATCTCTGTTGTTGAGTGAAGTGAAGTGAAGTGAAGTGAAGT 129
Db 92 TCACCTGATCGAATCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 151
QY 130 -GAACATCAATCAAGACCAAGTCAAACTGACCTCTCCGCTACTCTAAGATCCG 188
Db 152 CGATCGATCGAACAAGATCAAGATCAAGTCTGATCTGATCTGATCTGATCTG 211
QY 189 TACTCAGAAATCAGAACATCATCTTCAACTCCGATATCTCTGGAATCTCTCTG 248
Db 212 TATCTGGAAGATGCTATCGTATACAACTCTATGTACGAAATCTCTCCACTC 271
QY 249 GATTCGTATCCCAATACAAAGACGCGGTATCCAGATTTACATCCCAATGATAC 308
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QY 309 CATCATCAATCGATGAAGAATAAATCTCTGTTGGAAGATCTCCATCCGCGTAA 368
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QY 486 CCGTGAAGATCTCTGAAATACATCAATCGCTGTTCTGTTTACATCAACCAATA 545
Db 503 TCTGAATACTCCAAATATCTTACATCAACGCGCTCTGATCGACCAAGAACGAT 562
QY 546 CATCCGTGAGTATCTGCTCAACGCTGAATCATCTTCAACTGAGCGGTGATCG 605

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RESULT 6
US-08-981-087A-6
; Sequence 6, Application US/08981087A
; Patent No. US20020081304A1
; GENERAL INFORMATION:
; APPLICANT: Elmore, Michael J.
; APPLICANT: Mauchline, Margaret L.
; APPLICANT: Minton, Nigel P.
; APPLICANT: Pasechnik, Vladimir A.
; APPLICANT: Titball, Richard W.
; TITLE OF INVENTION: TYPE F BOTULINUM TOXIN AND USE THEREOF
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: NIXON & VANDERHUYE P.C.
; STREET: 1100 No. US20020081304Alth Giebe Rd. 8th floor
; CITY: Arlington
; STATE: VA
; COUNTRY: USA
; ZIP: 22201-4741
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/981,087A
; FILING DATE: 27-MAY-1998
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:

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Db 563 TCTGGTAACATCCACGCTTCTTAATAACATCATCTTCAAACTGGACGGTGTCTGACAC 622
QY 606 TACCCAGTTCAATCTGGAATGAATATCTTCTCCATCTTCAACACGCAACTGCTCAGTCCAA 665
Db 623 TCACCGCTACATCTGGATCAAAATCTTCAATCTTCTCGACAAGAACTGAACAAAGA 682
QY 666 TATCGAAGAAGGCTACAAAGATCCAGTCTTACTCCGAATACCTGAAAGACTTCTGGGATA 725
Db 683 RATCAAAAGACCTGTACGACCAACAGTCCATCTTCTGGTATCTGTAAGACTTCTGGGTGA 742
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QY 786 CAAACTGAAGAAAGACTCTCCGCTTGGTGAATCTGACTGCTTCTCCAAATACACACAGAA 845
Db 803 TGACGTCACATGTAGGTATCCGCGGTATACATGTACCTGAAAGGTCGCGGTGTTCTGT 862
QY 846 CTCTAAATACATCAACTACCGGACCTGTACATCGGTGAAAGTTATCATCTCGTCCAA 905
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QY 906 ATCTAATCTCAGTCCATCAATGATGACATCGTACGTAAGAAAGACTACATCTACCTGGA 965
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QY 1026 AGAAAGCTTTTCTCGGCTCGATCTGATTCGCAACTCTACCAACTTACACACCATCCAGAT 1085
Db 1043 AAGATCTTGTCTGCTGGAATATCCGAGCTGGTGAATCTGTCTCAGGTAGTTGTAAT 1102
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Db 1103 GAAATCCAAAGAACCGAGGTA---TCACTAAACAATGCAAAATGAAATCTGCAGGACAA 1159
QY 1146 ATCTACTGACGAATCGGTCTGATCGGTATCCCGTATCCCGTCTTCTACGA 1190
Db 1160 CAATGTAACGATATCGGTTCTGCTGTTCCAGGTTCCAGGTTCAACAA 1204

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APPLICATION NUMBER: PCT/GB96/01409
FILING DATE: 12-JUN-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: GB 9511909.5
FILING DATE: 12-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Crawford, Arthur R.
REGISTRATION NUMBER: 25,327
REFERENCE/DOCKET NUMBER: 124-688
TELECOMMUNICATION INFORMATION:
TELEPHONE: 703-816-4000
TELEFAX: 703-816-4100
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 1313 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-981-087A-6

Query Match 18.1%; Score 242.6; DB 8; Length 1313;
Best Local Similarity 56.6%; Pred. No. 3.3e-59;
Matches 603; Conservative 0; Mismatches 429; Indels 33; Gaps 7;
QY 15 CAACAATACAAATCCGAAATCCTGAACAATATCATCTCTGAACTCGGTTTACAAAGACAA 74
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QY 135 GAA-----TGACAAGAACCACTTCAAACTGACCTCTCCGCTAACCTCTAAGATCCGCTG 188
DB 167 CTACTCTACTACCCGACCACTGCTGCTATCTACTCTCTCTCTCTCTCTCTCTCTCTCT 226
QY 189 TACTCAGATCAGACATCATCTCTGATCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 248
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QY 249 GATTCCTATCCGGAATACAAAGACGAGCTATCCAGAAATACATCCACATGAATACAC 308
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QY 366 TATCATCTGACTCTGATGATATCAACGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 425
DB 398 AATCATCTGACTCTGAGGACACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 457
QY 426 CATCCGTGAAGACATCTCTGATATCAATCAATCAATCAATCAATCAATCAATCAATCA 485
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QY 486 C---CTGACATCTGTAATCTATCACTCAACGCTGCTGCTGCTGCTGCTGCTGCTGCTG 542
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QY 543 AGACATCCGCTGAAGTTATCGCTAAGGCTGAATATCTCTTCAAACTGGACGCTGATACGA 602
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DB 869 GAAACCTTAATATCTCTCTTAACACTGCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 928
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RESULT 7
US-09-350-756-5
; Sequence 5, Application US/09350756
; Patent No. US20020034521A1
; GENERAL INFORMATION:
; APPLICANT: U.S. Army Medical Research Institute for Infectious Diseases
; APPLICANT: John S. Lee
; APPLICANT: Peter Pushko
; APPLICANT: Michael D. Parker
; APPLICANT: Jonathan F. Smith
; APPLICANT: Mark T. Dertzbaugh
; APPLICANT: Leonard Smith
; TITLE OF INVENTION: Botulinum Neurotoxin Vaccine
; FILE REFERENCE: 003/124/SAP RIID 98-21
; CURRENT APPLICATION NUMBER: US/09/350,756
; EARLIER FILING DATE: 1999-07-09
; EARLIER FILING DATE: 1998-07-10
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: Apple Macintosh Microsoft Word 6.0
; SEQ ID NO 5
; LENGTH: 1317
; TYPE: DNA
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: /note="synthetic sequence encoding botulinum neurotoxin"
US-09-350-756-5

Query Match 18.1%; Score 242.6; DB 10; Length 1317;
Best Local Similarity 56.6%; Pred. No. 3.3e-59;
Matches 603; Conservative 0; Mismatches 429; Indels 33; Gaps 7;
QY 15 CAACAATACAAATCCGAAATCCTGAACAATATCATCTGAACTCGGTTTACAAAGACAA 74
DB 48 CAACAAGCTGTACAAGAAGATCAAGGACAACTCCATCTTGGACATGAGATACGAAACAA 107
QY 75 CAATCTGATCGATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 134
DB 108 TAAGTTCTATCGATCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 167
QY 135 GAATGACAAG-----AACGAGTTCAAACTGACCTCTTCCGCTAACCTTAAGATCCGCTG 188
DB 168 CTACTCCCAATGAACCACTCTCGAATCTACTCTTCCCAAGCTTCCGAGGTCAACAT 227
QY 189 TACTCAGATCAGACATCATCTTCACTCCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 248
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399 GATCATCTGGACCTCGAGACACCGCGGTAAATCAATCAGAGTCTGTTCTCAACTACAC 458
426 CATCCGTTGAAGACATCTCTGAATACATCAATCTGCTGTTCTGTTTACCATCACCAATAA 485
459 CCAGATGATCTCCATCTCCGATACATCAACAAGTGAATCTTGTCACCATCACCAATAA 518
486 CC---TGACAACTGCTAAATCTACATCAACGTTAACTGGAATCTTAATACCGACATCAA 542
519 CCGTTTGGGAATCCAGAAATCTACATCAACGTTAACTGATCGAGAGAGTCCCATCTC 578
543 AGACATCCGTGAAGTTATCTGCTAAACGTTGAATCATCTTCAAACTGGAGGTTGACATCGA 602
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663 CAATATCAAGAAAGGTTACAGATCCAGTCTTACTCCGAATCTCTGAAAGACTTCGAGG 722
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990 CATCAACGTTCTGACAGAGATGTCGAATACCGTCTGACGCGGATATCTCTATCGCCAA 1049
1020 AGAAGAAAGAAAGTTTCTCGCTCCGATCTCTGATTCGAGCA 1064
1050 AACTGAAAGATCATCAAGCTGATCCGTTACTCTTAACCTTAACAA 1094

RESULT 8

US-09-350-756-10
; Sequence 10, Application US/09350756
; Patent No. US20020034521A1
; GENERAL INFORMATION:
; APPLICANT: U.S. Army Medical Research Institute for Infectious Diseases
; APPLICANT: John S. Lee
; APPLICANT: Peter Pushko
; APPLICANT: Michael D. Parker
; APPLICANT: Jonathan F. Smith
; APPLICANT: Mark T. Dertzbaugh
; APPLICANT: Leonard Smith
; TITLE OF INVENTION: Botulinum Neurotoxin Vaccine
; FILE REFERENCE: 003/124/SAP R11D 98-21
; CURRENT APPLICATION NUMBER: US/09/350,756
; CURRENT FILING DATE: 1999-07-09

; EARLIER APPLICATION NUMBER: US 60/092,416
; EARLIER FILING DATE: 1998-07-10
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: Apple Macintosh Microsoft Word 6.0
; SEQ ID NO 10
; LENGTH: 702
; TYPE: DNA
; ORGANISM: Clostridium botulinum
; FEATURE:
US-09-350-756-10

Query Match 16.5%; Score 221.6; DB 10; Length 702;
Best Local Similarity 61.1%; Pred. No. 2.2e-53;
Matches 419; Conservative 0; Mismatches 249; Indels 18; Gaps 3;

QY 15 CAACAATAAATTCGGATCTCGAATATATCATCTGAACTCGGTACAAAGACA 74
DB 24 CACTGAATACATCAAGAACATCATCAATCACTCCATCTGAACTCGGTACAA 83
QY 75 CAATCTGATCATCTGCTGTTACGGTGTAAAGTTGAATAGACGGTGT----- 129
DB 84 TCACCTGATGACCTGCTGCTACGCTTCCAAATCAACATCGGTTCTTAAAGTTAACTT 143
QY 130 -GAACTGAATGACAAAGAACAGTTCAAACTGACCTCTTCGGTAACTCTAAGATCCGTGT 188
DB 144 CGATCCGATCGAAGAAATCAGATCCAGCTGTTCAATCTGGAATCTTCCAAATCGAAGT 203
QY 189 TACTCAGAATCAGAACATCATCTTCAACTCCGTTATCTCTGGACTTCTGTTTCCTG 248
DB 204 TATCCTGAAGAATGCTATCGTATACAACTATATGACGAAACTTCTCCACCTCTCTG 263
QY 249 GATTCGATCTCCGAAATACAGAACGAGGTATCCAGATATACATCCACAATGAATACAC 308
DB 264 GATCCGATCTCCGAAATATCTCACTCC-----ATCTCTGAAACAATGAATACAC 314
QY 309 CATCATCAACTGATGAAGAAATCACTCTGTTGGAAGATCTCCATCCGCGGTAAACGAT 368
DB 315 CATCATCAACTGATGAAGAAATCACTCTGTTGGAAGATCTCTGAACTACGGTGAAT 374
QY 369 CATCTGACTCTGATCGATATCAACGGTAGACCAATCTGTATTCTTCTGAAATACACAT 428
DB 375 CATCTGACTCTGACGACACTCAGGAAATCAAAACAGCGGTGTTGTTTCAATATCTCTCA 434
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DB 435 GATGATCAACATCTCTGACTACATCATCTGTTGTTTACCATCAACCAACATCG 494
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DB 675 AATCAAGAACCTGTACGACAAACCACT 700

RESULT 9

US-10-051-952-9
; Sequence 9, Application US/10051952
; Patent No. US20020107199A1
; GENERAL INFORMATION:
; APPLICANT: Walker, Patricia
; TITLE OF INVENTION: Methods of Administering Botulinum Toxin
; FILE REFERENCE: 2933CIP
; CURRENT APPLICATION NUMBER: US/10/051,952


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RESULT 11
US-09-350-756-9
; Sequence 9, Application US/09350756
; Patent No. US20020034521A1
; GENERAL INFORMATION:
; APPLICANT: U.S. Army Medical Research Institute for Infectious Diseases
; APPLICANT: John S. Lee
; APPLICANT: Peter Pushko
; APPLICANT: Michael D. Parker
; APPLICANT: Jonathan F. Smith
; APPLICANT: Mark T. Dertzbaugh
; APPLICANT: Leonard Smith
; TITLE OF INVENTION: Botulinum Neurotoxin Vaccine
; FILE REFERENCE: 003/124/SAP RIID 98-21
; CURRENT APPLICATION NUMBER: US/09/350,756
; EARLIER FILING DATE: 1999-07-09
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; EARLIER FILING DATE: 1998-07-10
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: Apple Macintosh Microsoft Word 6.0
; SEQ ID NO 9
; LENGTH: 1327
; TYPE: DNA
; ORGANISM: Clostridium botulinum
; FEATURE:
US-09-350-756-9

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Query Match          9.2%; Score 123; DB 10; Length 1327;
Best Local Similarity 50.2%; Pred. No. 3.3e-25;
Matches 396; Conservative 0; Mismatches 375; Indels 18; Gaps 3;

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QY 20 AATCAATTCGGAATCCTGAACAATATCATCTGACCTGCGGTACAAAGACAAACAATC 79
DB 29 AATATTAAGAATATTAATTAATCTCTATATGATTTAAGATATGAAGTAATCAIT 88
QY 80 TGATCGATCTCTGTTAGCGGTCTAA-----GTTGAAGTATACGAGGTTGTAAC 133
DB 89 TAATAGACTTATCTAGGTATGCATCAAAAATAAATATTGTTAGTAAAGTAATTTTATC 148
QY 134 TGAATGACAAACAGTTCAAACTGACCTCTCCGCTAACTCTAAGATCCGTTTACTC 193
DB 149 CAATAGATAAATAATCAATTCATTAATTTAGAACTAGTAATAATTGAGTAAATTT 208
QY 194 AGAATCAGAACATCATCTTCAACTCCGTATCTCTGAGCTTCTCTGTTCTCTGTTGATTC 253
DB 209 TAAAAATGCTATTGTATATAATAGTATGATGAAAAATTTTACTAGTCTTTTGGATAA 268
QY 254 GTATCCGAAATACAAAGACGCGTATCCAGATTAATCCCAATGATTAATACACCATCA 313
DB 269 GAATTCCTTAAGTATTTTAAACAGTATAAGTCTAAAT-----AATGAATATACATAA 319
QY 314 TCAATCGATCAAGAATAAATCTCTGTTTGGAGATCTCCATCCGCGGTAAACCGTATCATCT 373
DB 320 TAATTTGATGAAATAATTCAGATGGAAGTATCACTTAATTAATGTTGAATAATCT 379
QY 374 GGACTCTGATGATATCAACGCTAAGACCAATCTGTTCTTCGATTAATCAACATCCGTCG 433
DB 380 GGACTTTACAGGATCTCAGGAAATAAACAAGAGTAGTTTTTAAATACAGTCAAAATGA 439
QY 434 AAGACATCTCTGAATACATCAATCGCTGTTCTTCGTTTACCATCACCAATAA---CCTGA 490
DB 440 TTAATATATCAGATTAATTAACAGATGGATTTTGTAACTATCACTAATAATAGATTAA 499
QY 491 ACAATGCTAAATCTACATCAACGCTAACTGGAATCTATATCCGACATCAAGACATCC 550
DB 500 ATACTCTAAAATTTATATAATGAAGATTAAATAGATCAAAAACCAATTTCAAATTTAG 559
QY 551 GTGAAGTTATCGTAAACGCTGAAATCATCTTCAAACTGGACGCTGACATCGATCGTACCC 610
DB 560 GTAATATTCATGCTAGTAAATTAATTAATGTTTAAATAGATGGTTGTAGATACACATA 619
QY 611 AGTTCAATCTGGATGAAATCTCTCCATCTTCAACACGCGAATCTCTCAGTCCCAATATCG 670
DB 620 GATATATTTGGATAAATAATTTTAACTCTTTTGTAGAGGAATTAATGAAAGAAATCA 679
QY 671 AAGAAGGTACAAAGATCCAGTCTTACTCCGAATACCTGAAAGACTTCTGGGGTAAATCCGC 730
DB 680 AAGATTTATGATTAATCAATCAATTCAGGTATTTTAAAGACTTTTGGGTGATTAAT 739
QY 731 TGATGTACAAAGAATACTATATGTTCAATGCTGGTGAACAAGAACTCTTACATCAAC 790
DB 740 TACAATATGATAAACCATACTATATGTTTAAATTTATATGATCCAAATAAATATGTCGATG 799
QY 791 TGAAGAAAG 799
DB 800 TAAATAAG 808

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RESULT 12
US-09-288-326-10

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: Sequence 10, Application US/09288326

: Patent No. US20010018049A1

: GENERAL INFORMATION:

: APPLICANT: Kei Roger Aoki

: APPLICANT: George Sachs

: TITLE OF INVENTION: Method and Compositions for the

: FILE OF INVENTION: Treatment of Pancreatitis

: FILE REFERENCE: 17282

: CURRENT APPLICATION NUMBER: US/09/288,326

: CURRENT FILING DATE: 1999-04-08

: NUMBER OF SEQ ID NOS: 11

: SOFTWARE: FastSeq for Windows Version 3.0

: SEQ ID NO 10

: LENGTH: 4835

: TYPE: DNA

: ORGANISM: Clostridium botulinum

: US-09-288-326-10

Query Match 9.2%; Score 123; DB 10; Length 4835;

Best Local Similarity 50.2%; Pred. No. 6.6e-25;

Matches 396; Conservative 0; Mismatches 375; Indels 18; Gaps 3;

QY 20 AATCAATCCGAATCTCGAATATCATCTCGAACCTCGGTACAAAGACAACAATC 79

DB 2960 AATATTAAGAATATTAATTAATCTCTATTAATTAAGATAGAAAGTAATCAIT 3019

QY 80 TGATCGATCTGTCTGGTTACGGTGCTAAA-----GTTGAAGTATACGACGGTGTGAAC 133

DB 3020 TAATAGACTTATCTAGGTATCATCAAAATAAATAATTTGGTAGTAAAGTAATTTTGATC 3079

QY 134 TGAATGACAAGACAGTTCGAAGTACCTCTCCGCTAACTCTTAAGATCCGTTACTC 193

DB 3080 CAATAGATAAATAAATCAATCAATTAATTAATTAAGAGTAGTAAATTCAGGTAAIT 3139

QY 194 AGAATCAGAACATCATCTTCAACTCCGTTATTCCTCGACTCTCTCTGTTTCTCTCGATTC 253

DB 3140 TAAAAATGCTATTCATATAATAGTATGTATGAATAATTTAGTACTAGCTTTTGGATAA 3199

QY 254 GTATCCGGAATACAGAACGAGTTCAGAGATATACATCCCAATGAATACACCATCA 313

DB 3200 GAATTCCTAAGTATTTTACAGTAGTAAGTCTTAAT-----AATGAATATACAATAA 3250

QY 314 TCAACTGCATGAAGATAACHTCTGTTGGAAGATCTCCATCCGCGGTAAACCGTATCATCT 373

DB 3251 TAAATTTGTGAAATAATTCAGGATGAAAGTATCACTTAATTTGGTGAATAATCT 3310

QY 374 GGCCTCTGATCATCAACGATAGACCAATCTGTATCTTCGAATACAACATCCGTC 433

DB 3311 GGACTTTACAGGATCTCTCAGGAATAAACAAGAGTAGTTTTTAATACAGTCAAAATGA 3370

QY 434 AAGACATCTCTGAATACATCAATCGTCTGTTTCTGTTTACCATCAACCAATAA---CCTGA 490

DB 3371 TTAATATATACAGTATATAAACAATGGATTTTGTAACTATCACTAATAATAGATTAA 3430

QY 491 ACAATGCTAAATCTACATCAACGTAACCTGGAATCTTAATACGACATCAAGACATCC 550

DB 3431 ATAACTCTAAATTTATATAAATGGAAGTAAATAGATCAAAAACCAATTTTCAAAATTAG 3490

QY 551 GTCAAGTTATCGTAACGAGTGAATCATCTTCAAACTGCGGTGACATCGTACCC 610

DB 3491 GTAATATTCATCTAGTATAATTAATGTTTAAATAGATGGTTGTAGAGATACACATA 3550

QY 611 AGTTCATCTGGATGAATATCTCTCCATCTTCAACACCGAACTGTCAGTCCCAATATCG 670

DB 3551 GATATATTTGGATAAATAATTTTAATCTTTTGTGAAGAGTAAATGAAAAGAAATCA 3610

QY 671 AACAACGGTACAGATCCAGTCTTACTCGGAATACCTCAAGACTCTCGGGTAAATCGC 730

DB 3611 AAGATTTATAGTAAATCAATCAATTCAGGTATTTTAAAGACTTTTGGGTGATTAIT 3670

QY 731 TGATGTACAAAGAATACTATATGTTTCAATGCTGGTAACAGAACTCTTACATCAAAC 790

DB 3671 TACAATATGATAAACCACTATATGTTTAAATTTATATGATCCAAATAAATATGTCGATG 3730

QY 791 TGAAGAAAG 799

DB 3731 TAAATAATG 3739

RESULT 13

US-10-051-952-1

: Sequence 1, Application US/10051952

: Patent No. US20020107199A1

: GENERAL INFORMATION:

: APPLICANT: Walker, Patricia

: TITLE OF INVENTION: Methods of Administering Botulinum Toxin

: FILE REFERENCE: 2933CIP

: CURRENT APPLICATION NUMBER: US/10/051,952

: CURRENT FILING DATE: 2002-01-17

: PRIOR APPLICATION NUMBER: 09/730,237

: PRIOR FILING DATE: 2000-12-05

: NUMBER OF SEQ ID NOS: 12

: SOFTWARE: PatentIn Ver. 2.1

: SEQ ID NO 1

: LENGTH: 3891

: TYPE: DNA

: ORGANISM: botulinum toxin

US-10-051-952-1

Query Match 8.9%; Score 119.8; DB 12; Length 3891;

Best Local Similarity 49.9%; Pred. No. 4.8e-24;

Matches 394; Conservative 0; Mismatches 377; Indels 18; Gaps 3;

QY 20 AATCAATTCGGAATCTCGAACAATATCATCTCGAACCTCGGTACAAAGACAACAATC 79

DB 2603 AATATTAAGAATATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAAT 2662

QY 80 TGATCGATCTGTCTGGTTACGGTGCTAAA-----GTTGAAGTATACGACGGTGTGAAC 133

DB 2663 TAATAGACTTATCTAGGTATCATCAAAAATAAATATTTGGTAGTAAAGTAATTTTGATC 2722

QY 134 TGAATGACAAGAACAGTTCGAAGTACCTCTCCGCTAACTCTTAAGATCCGTTACTC 193

DB 2723 CAATAGATAAATAAATCAATCAATTAATTAATTAAGAGTAGTAAATTCAGGTAAIT 2782

QY 194 AGAATCAGAACATCATCTTCAACTCCGTTATTCCTGGACTCTCTGTTTCTCTTGGATTC 253

DB 2783 TAAAAATGCTATTTGTATATAATATAGTATGATGAAAAATTTTAGTACTAGCTTTGGATAA 2842

QY 254 GTATCCGGAATACAGAACGAGTTCAGAGATTCACATCCCAATGAATACACCATCA 313

DB 2843 GAATTCCTAAGTATTTTAAACAGTATTAAGTCTAAAT-----AATGAATATACAATAA 2893

QY 314 TCAACTGCATGAAGAAATAAATCTGTGTTGGAAGATCTCCATCCGCGGTAAACCGTATCATCT 373

DB 2894 TAAATTTGTGAAATAATTTCAAGGATGGAAGTATCACTTAATTTATGTTGAATAATCT 2953

QY 374 GGCATCTGATCATCAACGTTAAGACCAATCTGTATCTTCGGAATACAACATCCGTC 433

DB 2954 GGACTTTACAGGATCTCTCAGGAATAAACAAGAGTAGTTTTTAATAGAGTCAATGA 3013

QY 434 AAGACATCTCTGAATACATCAATCGCTGTTTCTTCGTTTACCATCAACCAATAA---CCTGA 490

DB 3014 TTAATATATACAGATATATAAACAAGATGGAATTTTGAACATATCACTAATAATAGATTAA 3073

QY 491 ACAATGCTAAATCTACATCAACGTTAAGTGAATCTTAATACCGACATCAAGACATCC 550

DB 3074 ATAACCTCTAAATTTATATAAATGGAAGATTAATAGATGAAAAACCAATTTCAAAATTAG 3133

QY 551 GTGAAGTTATCCCTAACCGTGAATATCATCTTCAAACTGGACGTCAGATCGATCGTACCC 610

DB 3134 GTAATATTCATCTAGTAAATTAATTAATTAATTAATTAATTAATTAATTAATTAAT 3193

QY 611 AGTTCATCTGGATGAATATCTCTCCATCTTCAACACCGAACTGTCAGTCCCAATATCG 670

DB 3194 GATATATTTGGATAAATAATTTTAAATCTTTTGTAGGAATTAATTAATGAAAAAGAAATCA 3253


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QY 671 AGAAGCGGTACAGATCCAGTCTTACTCCGGAATACCTCGAAAGACTTCTGGGGTAATCCGC 730
Db 3254 AAGATTATATGATTAATCAATCAATCAGGTATTTTAAAAGACTTTGGGGTGATTATT 3313
QY 731 TGATGTACAAACAAAGAACTACTATGTTCAATGCTGGTAAACAAGAACTCTTACATCAAAAC 790
Db 3314 TACAATATGATAAACCATAGTATATGTTAAATTTATATGATCCAAATAAATATGTCGATG 3373
QY 791 TGAAGAAAG 799
Db 3374 TAAATAATG 3382

RESULT 14
US-09-350-756-3
; Sequence 3, Application US/09350756
; Patent No. US20020034521A1
; GENERAL INFORMATION:
; APPLICANT: U.S. Army Medical Research Institute for Infectious Diseases
; APPLICANT: John S. Lee
; APPLICANT: Peter Pushko
; APPLICANT: Michael D. Parker
; APPLICANT: Jonathan F. Smith
; APPLICANT: Mark T. Dertzbaugh
; APPLICANT: Leonard Smith
; TITLE OF INVENTION: Botulinum Neurotoxin Vaccine
; FILE REFERENCE: 003/124/SAP RIID 98-21
; CURRENT APPLICATION NUMBER: US/09/350,756
; CURRENT FILING DATE: 1999-07-09
; EARLIER APPLICATION NUMBER: US 60/092,416
; EARLIER FILING DATE: 1998-07-10
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: Apple Macintosh Microsoft Word 6.0
; SEQ ID NO 3
; LENGTH: 1371
; TYPE: DNA
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: /note="synthetic sequence encoding botulinum neurotoxin"
US-09-350-756-3

Query Match 8.9%; Score 118.8; DB 10; Length 1371;
Best Local Similarity 50.6%; Pred. No. 5.2e-24;
Matches 411; Conservative 0; Mismatches 347; Indels 54; Gaps 3;

QY 10 ATGGCCAAACAATACAAATTCGGAATCTCGAACATATCATCTCGAACCTGGGTACAAA 69
Db 64 ATCATCAAGGATGACTTCAACAACATCAACGACTCCGAAGATCTGTCCTCGCAGAACCGT 123
QY 70 GACAAACAATCTGATCGATCTGTCTGGTTACGGTGCTTAAAGTTGAAGTTATACGACGGTGT 129
Db 124 AAGAACACCTTGGTCGACACCTCGGTTACACGCCGAGGTCCTCCGAGGAGGGTGCATC 183
QY 130 GAAGTGAATGACAAACACAGTTCNAATGA-----CCTCTTCGGGTAACTCT 177
Db 184 CAGCTGAAACCCCAATCTTCCCATTCGACTTCAAGCTGGGTTCCCTCCGCTGAGGACAGAGT 243
QY 178 AAGATCCGTTGTACTCAGAAATCAGAAATCATCTTCAACTCCGTTATCTCTGGACTTCTCT 237
Db 244 AAGGTATCGTCAACCCAGNACGAGNACATGCTCTACAACTCCATGTACGAGTCCCTTCTCC 303
QY 238 GTTTCCTTCTGGATTCGTATCCCGAAATACAAAGAACGACGATATCCAGAAATTACATCCAC 297
Db 304 ATCTCCTTCTGGATCAGATCAACAAGTG-----GGTCTCCAAGTTG 345
QY 298 AATGAATACACCATCATCAACTGATGAAGAAATAAATCTGTTGGAAGATCTCCATCCGC 357
Db 346 CCAGGTTACACCATCATCGACTCCGCTCAAGAACAACTCCGGTTGGTCCATCGGTATCATC 405
QY 358 GGTAACCGTATCATCTGGCACTCTGATCGATATCAACGGAATGAAGCAAAATCTGTTATCTTC 417
Db 406 TCCACCTTCTGGTCTTTCACCTCGAAGCAGAACGAGACTCCGAGCAGTCCATCAACTTC 465

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QY	418	GAATACAAACATCGGTGAAGACATCTCTGTAATACATCAATCGCTGGTTCTTCGTTACCATC	477
Db	466	TCCTAGGACATCTCCCAACACCGTCCTGGTTTACAACAAGTGGTTCTTCGTTACCGGTCAAC	525
QY	478	ACCAATAAAGCTGAACAAATGCTAAAACTCTACATCAACGGTAAACTGGAATCTTAATACCGAC	537
Db	526	AACAACATGATGGTAACTGAAGATCTACATCAACGGTAACTGATCGACACCATCAAG	585
QY	538	ATCAAGACATCGGTGAAGTTATTCGGTAACGGTGAATATCATCTTCCAAACTGGACGGTGAC	597
Db	586	GTCAAGGAGTTGACCGGTATCAACTTCTCCAAGACCATCACTCTCGAGATCAACAAGATC	645
QY	598	ATCGATCGTACCCAGTTCATC-----TGGATGAATACTTTC	633
Db	646	CCAGACACCGGTCTGATCACTCCGACTCCGACATATCAACATGTGGATCCGTGACTTC	705
QY	634	TCCATCTTCAACACCGAATGTCTCAGTCCCAATATTCGAAGAACGGTACAAGATCAGTCT	693
Db	706	TACATCTTCGCCAAGAGTTGGACGGTAAGGACATCAACATCCCTGTTTCAACCTCTCGAG	765
QY	694	TACTCCGAATACCTGAAAGACTTCTGGGGTAATCCGGCTGATGTACACAAAAGAATACTAT	753
Db	766	TACACCAACGTCGTCGAAGCACTACTGGGTGACGACCTGAGATACACAACAGSAGTACTAC	825
QY	754	ATGTTCAATGCTGGTAAACAAGAACTCTTACAT	785
Db	826	ATGTTCAACATCGACTACTTGAACAGATACAT	857
RESULT 15			
US-09-350-756-7			
; Sequence 7, Application US/09350756			
; Patent No. US20020034521A1			
; GENERAL INFORMATION:			
; APPLICANT: U.S. Army Medical Research Institute for Infectious Diseases			
; APPLICANT: John S. Lee			
; APPLICANT: Peter Pushko			
; APPLICANT: Michael D. Parker			
; APPLICANT: Jonathan F. Smith			
; APPLICANT: Mark T. Dertzbaugh			
; APPLICANT: Leonard Smith			
; TITLE OF INVENTION: Botulinum Neurotoxin Vaccine			
; FILE REFERENCE: 003/124/SAP RIID 98-21			
; CURRENT APPLICATION NUMBER: US/09/350,756			
; CURRENT FILING DATE: 1999-07-09			
; EARLIER APPLICATION NUMBER: US 60/092,416			
; EARLIER FILING DATE: 1998-07-10			
; NUMBER OF SEQ ID NOS: 11			
; SOFTWARE: Apple Macintosh Microsoft Word 6.0			
; SEQ ID NO 7			
; LENGTH: 2452			
; TYPE: DNA			
; ORGANISM: Clostridium botulinum			
; FEATURE:			
US-09-350-756-7			
Query Match 7.9%; Score 105.8; DB 10; Length 2452;			
Best Local Similarity 49.9%; Pred No. 3.5e-20;			
Matches 394; Conservative 0; Mismatches 367; Indels 28; Gaps			
QY	20	AATACAAATCCGAAATCCTGAACAATATCATCCTGAACCTGGTTTACAAAGACACAATC	79
Db	1174	AATATATTAGAATATATTATTAATCTTCTATATTGAATTTAAGATATGAAAGTAATCAAT	1233
QY	80	TGATGATCTGCTCGTTACGGTGGTAAA-----GTTGAAGTATACGACGGTGTGAAC	133
Db	1234	TATAGACTATCTAGTATGATCATCAAAATAAATATTTGGTAGTAAGTAATTTTGATC	1293
QY	134	TGAATGACAAGAACCGTAGTTCAAACTGACCTCTCCGGCTTAATCTTAAGATCCGTTACTC	193
Db	1294	CAATAGATAAAATCAAAATCAATTTTAAATTTAGAAAGTAGTAAATTCGAGTAATTT	1353

Query Match 7.98: Score 105.8: DB 10: Length 2452;

Best Local Similarity 49.98; Pred. No. 3.5e-20;

Matches	394;	Conservative	0;	Mismatches	367
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1171 AATTATTTACATAAATCTTCTATTCATTTCAATTTAA

2025/11/11 11:11:11

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1234 TAATAGACTTATCTAGGTATGCATCAAAAATAAATATTGGTA

[illegible]

134 TGAATGACAAAGAACAGTTCAAAACGAGCCTCTTCGCTAACT

b 1294 CAATAGATAAAAATCAAATTCAAATTATTTAATTAGAAAGTA

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OM nucleic - nucleic search, using sw model

Run on: November 1, 2002, 06:20:38 ; Search time 3271 Seconds
(without alignments)

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Title: US-09-910-186A-7

Perfect score: 1341

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Searched: 24791104 seqs, 12571243825 residues

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1341	100.0	1341	34	US-09-910-186A-7
2	1339.4	99.9	1341	17	US-09-350-756-2
3	1339.4	99.9	1341	23	US-09-611-419A-7
4	1324.4	98.8	1348	23	US-09-611-419A-39
5	1319.4	98.4	1351	5	US-08-123-975A-6
6	741.2	55.3	1547	1	PCT-US97-15394-45
7	741.2	55.3	1547	11	US-08-704-159-45
8	741.2	55.3	1547	43	US-10-271-012-45
9	741.2	55.3	3876	1	PCT-US97-15394-41
10	741.2	55.3	3876	11	US-08-704-159-41
11	741.2	55.3	3876	43	US-10-271-012-41
12	736	54.9	3876	29	US-09-720-237-3
13	663.4	49.5	4051	21	US-09-547-188-3
14	662.8	49.4	1526	1	PCT-US97-15394-43
15	662.8	49.4	1526	11	US-08-704-159-43
16	662.8	49.4	1526	43	US-10-271-012-43
17	661.8	49.4	3876	1	PCT-US97-15394-39
18	661.8	49.4	3876	11	US-08-704-159-39
19	661.8	49.4	3876	42	US-10-205-516-3
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23 657 49.0 3876 39 US-09-730-237-2
24 657 49.0 3876 39 US-10-051-952-2
25 522.4 39.0 3509 42 US-10-241-596-19
26 426.8 31.8 1368 23 US-09-611-419A-17
27 426.8 31.8 1368 34 US-09-910-186A-17
28 417 31.1 1347 17 US-09-350-756-6
29 263 19.6 1323 23 US-09-611-419A-3
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31 263 19.6 1326 23 US-09-611-419A-5
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44 263 19.6 1338 17 US-09-350-756-1
45 263 19.6 1338 23 US-09-611-419A-37
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ALIGNMENTS

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RESULT 1
US-09-910-186A-7
; Sequence 7, Application US/09910186A
; GENERAL INFORMATION:
; APPLICANT: U.S. Army Medical Research & Materiel Command
; TITLE OF INVENTION: RECOMBINANT VACCINE AGAINST BOTULINUM
; FILE OF INVENTION: NEUROTOXIN
; FILE REFERENCE: A33626-A 067252.0107
; CURRENT APPLICATION NUMBER: US/09/910.186A
; PRIOR FILING DATE: 2001-07-20
; PRIOR APPLICATION NUMBER: PCT/US00/12890
; PRIOR FILING DATE: 2000-05-12
; PRIOR APPLICATION NUMBER: 09/611,419
; PRIOR FILING DATE: 2000-07-06
; PRIOR APPLICATION NUMBER: 60/133,865
; PRIOR FILING DATE: 1999-05-12
; PRIOR APPLICATION NUMBER: 60/133,866
; PRIOR FILING DATE: 1999-05-12
; PRIOR APPLICATION NUMBER: 60/133,867
; PRIOR FILING DATE: 1999-05-12
; PRIOR APPLICATION NUMBER: 60/133,868
; PRIOR FILING DATE: 1999-05-12
; PRIOR APPLICATION NUMBER: 60/133,869
; PRIOR FILING DATE: 1999-05-12
; PRIOR APPLICATION NUMBER: 60/133,873
; PRIOR FILING DATE: 1999-05-12
; PRIOR APPLICATION NUMBER: 08/123,975
; PRIOR FILING DATE: 1993-09-21
; NUMBER OF SEQ ID NOS: 34
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO. 7
; LENGTH: 1341
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct based on Clostridium botulinum
; NAME/KEY: CDS
; LOCATION: (10)...(1329)
US-09-910-186A-7
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Best Local Similarity 100.0%; Pred. No. 0;
Matches 1341; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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DB 61 CGTTACAAAGACAAACAATCTGATCGATCTCTCTGGTTACGGTCTAAAGTTGAAGTATAC 120
QY 121 GACGGTGTGAACCTGAATGACAGAACCAAGTTCAAACCTGACCTCTTCGCGTACTCTAAG 180
DB 121 GACGGTGTGAACCTGAATGACAGAACCAAGTTCAAACCTGACCTCTTCGCGTACTCTAAG 180
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DB 361 AACCGTATCATCTGGACTCTGATCGATATCAACGGTAAGACCAAAATCTGTTCTTCGAA 420
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RESULT 2
US-09-350-756-2
; Sequence 2, Application US/09350756
; GENERAL INFORMATION:
; APPLICANT: U.S. Army Medical Research Institute for Infectious Diseases
; APPLICANT: John S. Lee
; APPLICANT: Peter Pushko
; APPLICANT: Michael D. Parker
; APPLICANT: Jonathan F. Smith
; APPLICANT: Mark T. Dertzbaugh
; APPLICANT: Leonard Smith
; TITLE OF INVENTION: Botulinum Neurotoxin Vaccine
; FILE REFERENCE: 003/124/SAP RIID 98-21
; CURRENT APPLICATION NUMBER: US/09/350,756
; CURRENT FILING DATE: 1999-07-09
; EARLIER APPLICATION NUMBER: US 60/092,416
; EARLIER FILING DATE: 1998-07-10
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: Apple Macintosh Microsoft Word 6.0
; SEQ ID NO 2
; LENGTH: 1341
; TYPE: DNA
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: /note="synthetic sequence encoding botulinum neurotoxin"
US-09-350-756-2

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Best Local Similarity 99.9%; Pred. No. 0;
Matches 1340; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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QY 121 GACGGGTGTGAAGTCAATGACAAAGAACCCAGTTCAAACTGACCTTCCTCCGTAAGCTCTAAG 180
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QY 181 ATCCGGTGTACTCAGAATCAGAACATCATCTTCAACTCCGTTATTCCTGGACCTCTCTGTT 240
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QY 241 TCCTTCTGATTCGTATCCCGAATACAGAACGCGGTATCCAGTAATACATCCACAAAT 300
Db 241 TCCTTCTGATTCGTATCCCGAATACAGAACGCGGTATCCAGTAATACATCCACAAAT 300

QY 301 GAATACCATCATCAACTGGATGAAGAAATTAACCTGTTGGGAAGATCTCCATCCGCGGT 360

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RESULT 3

QY 301 GAATACACCATCATCAACTGCATGAAGATAACTCTGGTTGGAAGATCTCCATCCGCGGT 360

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US-09-611-419A-7
; Sequence 7, Application US/09611419A
; GENERAL INFORMATION:
; APPLICANT: Smith, Leonard A.
; APPLICANT: Byrne, Michael P.
; APPLICANT: Middlebrook, John L.
; APPLICANT: Lapanotiere, Hugh
; APPLICANT: Clayton, Michael A.
; APPLICANT: Brown, Douglas R.
; TITLE OF INVENTION: RECOMBINANT VACCINE AGAINST BOTULINUM
; TITLE OF INVENTION: NEUROTOXIN
; FILE REFERENCE: A33626 067252.0105
; CURRENT APPLICATION NUMBER: US/09/611,419A
; CURRENT FILING DATE: 2000-07-05
; PRIOR APPLICATION NUMBER: PCV/US00/12890
; PRIOR FILING DATE: 2000-05-12
; PRIOR APPLICATION NUMBER: 60/133,865
; PRIOR FILING DATE: 1999-05-12
; PRIOR APPLICATION NUMBER: 60/133,866
; PRIOR FILING DATE: 1999-05-12
; PRIOR APPLICATION NUMBER: 60/133,867
; PRIOR FILING DATE: 1999-05-12
; PRIOR APPLICATION NUMBER: 60/133,868
; PRIOR FILING DATE: 1999-05-12
; PRIOR APPLICATION NUMBER: 60/133,869
; PRIOR FILING DATE: 1999-05-12
; PRIOR APPLICATION NUMBER: 60/146,192
; PRIOR FILING DATE: 1999-07-29
; NUMBER OF SEQ ID NOS: 42
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 7
; LENGTH: 1341
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct based on BoNTA Hc
; NAME/KEY: CDS
; LOCATION: (10)...(1329)
US-09-611-419A-7

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QY	61	CGTTACAAAGACAAATCTGTATCGATCTCTTCGGTTACCGTGTCTGAAAGTGAAGTATAC	120	
DB	61	CGTTACAAAGACAAATCTGTATCGATCTCTTCGGTTACCGTGTCTGAAAGTGAAGTATAC	120	
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QY	241	TCCTTCTGATTCGTATCCCGAATACAGAACGAGCGGTATCCAGAAATTCATCCCAAT	300	
DB	241	TCCTTCTGATCCGTTATCCCGAATACAGAACGAGCGGTATCCAGAAATTCATCCCAAT	300	
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QY	361	AACCGTATCATCTGACCTGTATCGATATATCAACGGTAAAGACAAATCTGTATCTTCGAA	420	
DB	361	AACCGTATCATCTGACCTGTATCGATATATCAACGGTAAAGACAAATCTGTATCTTCGAA	420	

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Db	421	TACAA	CATCCGGTGAAGACATCTCTGAAATACATCAATCGCTGGTCTCTCGTACCATCACC	480
Qy	481	AATAA	CCCTGAACAAATGCTAAAATCTACATCAACGGTAAATCGAATCTAATACCGACATC	540
Db	481	AATAA	CCCTGAACAAATGCTAAAATCTACATCAACGGTAAATCGAATCTAATACCGACATC	540
Qy	541	AAAGAC	ATCCGGTGAAGTTATCCCTAACCGGTGAATCATCTTCAAACTGGAGCGTGACATC	600
Db	541	AAAGAC	ATCCGGTGAAGTTATCCCTAACCGGTGAATCATCTTCAAACTGGAGCGTGACATC	600
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Db	601	GATCG	TACCCAGTTCATCTGAGTGAATTAATCTTCCATCTTCAACACCGCAACTCTCTCAG	660
Qy	661	TCCAA	TATCGAAGACGGTACAGATCCAGTCTTACTCCGAATACCTGAAAGACTTCTGG	720
Db	661	TCCAA	TATCGAAGACGGTACAGATCCAGTCTTACTCCGAATACCTGAAAGACTTCTGG	720
Qy	721	GGTA	ATCCGCTGATGTACAAACAAAGAAATACTATATGTTCATGTGGTAAACAGAACTCT	780
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Qy	781	TACAT	CAAACTGAAGAAAGACTCTCCGGTGGTGAATCTCTGACTCGTTCCAAATACAAC	840
Db	781	TACAT	CAAACTGAAGAAAGACTCTCCGGTGGTGAATCTCTGACTCGTTCCAAATACAAC	840
Qy	841	CAGAA	CTTAATACATCAACTACCGCAGCTGTACATCGGTGAAAGTTTCATCATCCGT	900
Db	841	CAGAA	CTTAATACATCAACTACCGCAGCTGTACATCGGTGAAAGTTTCATCATCCGT	900
Qy	901	CGCAA	ATCTAACTCTCAGTCCATCAATGATGACATCGTACGTAAGAAAGACTACATCTAC	960
Db	901	CGCAA	ATCTAACTCTCAGTCCATCAATGATGACATCGTACGTAAGAAAGACTACATCTAC	960
Qy	961	CTGG	ACTTCTTCAACTGTAATCAGGAATGGCGTGATACACTACAACTACTTCAAGAAA	1020
Db	961	CTGG	ACTTCTTCAACTGTAATCAGGAATGGCGTGATACACTACAACTACTTCAAGAAA	1020
Qy	1021	GAAGA	AAAAAGCTTTTCCCTGGCTCCGATCTCTGTATCCGACGAACTCTACACACCATC	1080
Db	1021	GAAGA	AAAAAGCTTTTCCCTGGCTCCGATCTCTGTATCCGACGAACTCTACACACCATC	1080
Qy	1081	CAGAT	CAAGAANTACAGAGAACAGCGGACCTACTCTTCCAGCTGCTGTTCAAGAAAGAT	1140
Db	1081	CAGAT	CAAGAANTACAGAGAACAGCGGACCTACTCTTCCAGCTGCTGTTCAAGAAAGAT	1140
Qy	1141	GAA	GAATCTACTGACGAAATCGGTCTGTATCGGTATCCACCGTTTCTACGAATCTGGTATC	1200
Db	1141	GAA	GAATCTACTGACGAAATCGGTCTGTATCGGTATCCACCGTTTCTACGAATCTGGTATC	1200
Qy	1201	GTAT	TGAAAGTAATACAGACTTACTTCTGCAATCTCCAAATGGTACCTGAAAGAAAGTTAAA	1260
Db	1201	GTAT	TGAAAGTAATACAGACTTACTTCTGCAATCTCCAAATGGTACCTGAAAGAAAGTTAAA	1260
Qy	1261	CGCAA	CCGTACAACTGAACTGGGTGCAATTTGGCAGTTTCATCCCGAAAGACGAAAGGT	1320
Db	1261	CGCAA	CCGTACAACTGAACTGGGTGCAATTTGGCAGTTTCATCCCGAAAGACGAAAGGT	1320
Qy	1321	TGG	ACCAGTAATAGTAAGAATTC	1341
Db	1321	TGG	ACCAGTAATAGTAAGAATTC	1341

RESULT 4
US-09-611-419A-39
; Sequence 39, Application US/09611419A
; GENERAL INFORMATION:
; APPLICANT: Smith, Leonard A.
; APPLICANT: Byrne, Michael P.
; APPLICANT: Middlebrook, John L.
; APPLICANT: Lapentiere, Hugh

```

1  APPLICANT: Clayton, Michael A.
2  APPLICANT: Brown, Douglas R.
3  TITLE OF INVENTION: RECOMBINANT VACCINE AGAINST BOTULINUM
4  TITLE OF INVENTION: NEUROTOXIN
5  FILE REFERENCE: A33626 067252.0105
6  CURRENT APPLICATION NUMBER: US/09/611,419A
7  CURRENT FILING DATE: 2000-07-05
8  PRIOR APPLICATION NUMBER: PCT/US00/12890
9  PRIOR FILING DATE: 2000-05-12
10 PRIOR APPLICATION NUMBER: 60/133,865
11 PRIOR FILING DATE: 1999-05-12
12 PRIOR APPLICATION NUMBER: 60/133,866
13 PRIOR FILING DATE: 1999-05-12
14 PRIOR APPLICATION NUMBER: 60/133,867
15 PRIOR FILING DATE: 1999-05-12
16 PRIOR APPLICATION NUMBER: 60/133,868
17 PRIOR FILING DATE: 1999-05-12
18 PRIOR APPLICATION NUMBER: 60/133,869
19 PRIOR FILING DATE: 1999-05-12
20 PRIOR APPLICATION NUMBER: 60/146,192
21 PRIOR FILING DATE: 1999-07-29
22 NUMBER OF SEQ ID NOS: 42
23 SOFTWARE: FastSeq for Windows Version 4.0
24 SEQ ID NO 39
25 LENGTH: 1348
26 TYPE: DNA
27 ORGANISM: Artificial Sequence
28 FEATURE:
29 OTHER INFORMATION: Synthetic construct based on BoNTB HC
30 NAME/KEY: CDS
31 LOCATION: (1)...(1323)
32 OS-09-611-419A-39

```

Query Match 98.8%; Score 1324.4; DB 23; Length 1348;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 1325; Conservative 0; Mismatches 1; Indels 0;

QY	10	ATGGCCACAAATACAAATCCCGAAATCCTGACAAATATCATCTCGGAACCTGCGGTTACAA	59
Db	1	ATGGCCACAAATACAAATCCCGAAATCCTGACAAATATCATCTCGGAACCTGCGGTTACAA	60
QY	70	GACACAAATCTGATCGATCTGTCTGGTTACGGTGTCTAAAGTTGAAGTATACGACGGTGTT	129
Db	61	GACACAAATCTGATCGATCTGTCTGGTTACGGTGTCTAAAGTTGAAGTATACGACGGTGTT	120
QY	130	GAATCGAATGACAAAGAACAGTTTCAAATGACCTCTTCCGCTAACTCTAAGATCCCGTGTT	189
Db	121	GAATCGAATGACAAAGAACAGTTTCAAATGACCTCTTCCGCTAACTCTAAGATCCCGTGTT	180
QY	190	ACTCAGAAATCAGAACATCATCTTCAACTCCGTTATCTCTGGAGACTTCTCTGTTTCCCTTCGG	249
Db	181	ACTCAGAAATCAGAACATCATCTTCAACTCCGTTATCTCTGGAGACTTCTCTGTTTCCCTTCGG	240
QY	250	ATTCTGTATCCGGAATACAAAGACGACGGTATCCAGAAATACATCCCAAAATGAATACAC	309
Db	241	ATCCGTATCCGGAATACAAAGACGACGGTATCCAGAAATACATCCCAAAATGAATACAC	300
QY	310	ATCATCAACTGCGATGAAGAAATAACTCTGTGGTTGGAGATCTCCATCCGCGGGTAAACCGTATC	369
Db	301	ATCATCAACTGCGATGAAGAAATAACTCTGTGGTTGGAGATCTCCATCCGCGGGTAAACCGTATC	360
QY	370	ATCTGGACTCTGATTCGATATCAACGGTAAAGACCAAAATCTGTATTTCTTTCGAAATACAAATC	429
Db	361	ATCTGGACTCTGATTCGATATCAACGGTAAAGACCAAAATCTGTATTTCTTTCGAAATACAAATC	420
QY	430	CGTGAAGACATCTCTGAAATACATCAATCGCTGGTTTCCGTTTACCATTACCAATTAACCGT	489
Db	421	CGTGAAGACATCTCTGAAATACATCAATCGCTGGTTTCCGTTTACCATTACCAATTAACCGT	480
QY	490	AACAAATGCTAAATCTACATCAACGGTAAACTGGAAATCTAATACCGGACATCAAGACATC	549
Db	481	AACAAATGCTAAATCTACATCAACGGTAAACTGGAAATCTAATACCGGACATCAAGACATC	540

550	QY	CGTGAAGTTATCGCTAAACGGGTGAATATCAATCTTCAACATGGACGGTGCACATCGATCGTACC	609
541	Db	CGTGAAGTTATCGCTAAACGGGTGAATATCAATCTTCAACATGGACGGTGCACATCGATCGTACC	600
610	QY	CAGTTTCATCTGGATGAATACTCTCCATCTTCAACACCGAACTGCTCAGTCCCATATC	669
601	Db	CAGTTTCATCTGGATGAATACTCTCCATCTTCAACACCGAACTGCTCAGTCCCATATC	660
670	QY	GAAGAACGGTACAAGATCCAGCTTTACTCCGAATACCTTGAAGACTTCTTGGGGTAATCCG	729
661	Db	GAAGAACGGTACAAGATCCAGCTTTACTCCGAATACCTTGAAGACTTCTTGGGGTAATCCG	720
730	QY	CTGATGCTACAAAGAATACTATATGTTCAATGCTGGTAAACAAGAACTCTTACATCAAA	789
721	Db	CTGATGCTACAAAGAATACTATATGTTCAATGCTGGTAAACAAGAACTCTTACATCAAA	780
790	QY	CTGAAGAAAGACTCTCCGGTTGGTGAATCTCGACTCGTTCCAAATACAACACGAACTCT	849
781	Db	CTGAAGAAAGACTCTCCGGTTGGTGAATCTCGACTCGTTCCAAATACAACACGAACTCT	840
850	QY	AAATACATCAACTACCGGACCTGTACATCGGTGAAAGTTTCATCTCCGTGCCAAATCT	909
841	Db	AAATACATCAACTACCGGACCTGTACATCGGTGAAAGTTTCATCTCCGTGCCAAATCT	900
910	QY	AACTCTCAGTCCATCAATGATGACATCGTACGTTAAGNAGNACTACATCTTACCTGGACTTC	969
901	Db	AACTCTCAGTCCATCAATGATGACATCGTACGTTAAGNAGNACTACATCTTACCTGGACTTC	960
970	QY	TTCAACCTGAATCAGGAATGGCGTGTATACACCTTACAAGTACTTCAAGAAGAAGAGAA	1029
961	Db	TTCAACCTGAATCAGGAATGGCGTGTATACACCTTACAAGTACTTCAAGAAGAAGAGAA	1020
1030	QY	AAGCTTTTCTGGTCCGATCTCTGATTCGACGAACTCTTACAACACCATCCAGATCAAA	1089
1021	Db	AAGCTTTTCTGGTCCGATCTCTGATTCGACGAACTCTTACAACACCATCCAGATCAAA	1080
1090	QY	GAATACGAGAAACCGCGACCTACTCTTGCCAGCTGCTGTTCAAGAAGAATGAAGAATCT	1149
1081	Db	GAATACGAGAAACCGCGACCTACTCTTGCCAGCTGCTGTTCAAGAAGAATGAAGAATCT	1140
1150	QY	ACTGAGAAATCGGTCTGATCGGTATCCACCGTTTCTACGAATCTGGTATCGTATCGAA	1209
1141	Db	ACTGAGAAATCGGTCTGATCGGTATCCACCGTTTCTACGAATCTGGTATCGTATCGAA	1200
1210	QY	GAATACAAAGACTACTCTGCAATCTCCTAAATGGTACTGAAGGAAGTTAAACGCAACCG	1269
1201	Db	GAATACAAAGACTACTCTGCAATCTCCTAAATGGTACTGAAGGAAGTTAAACGCAACCG	1260
1270	QY	TACAACCTCAAACTGGGTGGCAATGGCAGTTTCATCCCGAAGACGGAAGGTTGGACCGAA	1329
1261	Db	TACAACCTCAAACTGGGTGGCAATGGCAGTTTCATCCCGAAGACGGAAGGTTGGACCGAA	1320
1330	QY	TAGTAA 1335	
1321	Db	TAGTAA 1326	

RESULT 5
 US-08-123-975A-6
 ; Sequence 6, Application US/08123975A
 ; GENERAL INFORMATION:
 ; APPLICANT: Middlebrook, John L
 ; APPLICANT: Laperotiere, Hugh F
 ; APPLICANT: Clayton, Michael A
 ; APPLICANT: Brown, Douglas R
 ; TITLE OF INVENTION: POLYPEPTIDE FUSION PRODUCT AS VACCINE
 ; TITLE OF INVENTION: AGAINST C. BOTULINUM
 ; NUMBER OF SEQUENCES: 6
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: John F. Moran
 ; STREET: Off. of Command Jdg. Adv.
 ; CITY: Fredrick

Db	549	AGTTATCGGTAAACGGTGAATCATCTTCAAACTGGACCGGTGACATCGATCGTACCCAGTT	608
QY	615	CATCTCGATGAATAACTTCTCCATCTTCAACACCGAACTGCTCAGTCCCAATATCGAAGA	674
Db	609	CATCTCGATGAATAACTTCTCCATCTTCAACACCGAACTGCTCAGTCCCAATATCGAAGA	668
QY	675	ACGGTACAAGATCCAGTCTTACTCCGAATACCTGAAAGACHTTCGGGGTAATCGCTGAT	734
Db	669	ACGGTACAAGATCCAGTCTTACTCCGAATACCTGAAAGACHTTCGGGGTAATCGCTGAT	728
QY	735	GTACAAACAAGAAATACTATATGTTCAATGCTGGTAAACAAGAACTCTTACATCAAACTGAA	794
Db	729	GTACAAACAAGAAATACTATATGTTCAATGCTGGTAAACAAGAACTCTTACATCAAACTGAA	788
QY	795	GAAAGACTCTCCGGTGGTGAATCGTGACTCGTTCCAAATACAAACAGAACTCTTAATA	854
Db	789	GAAAGACTCTCCGGTGGTGAATCGTGACTCGTTCCAAATACAAACAGAACTCTTAATA	848
QY	855	CATCAACTACCGGACCTGTACATCGGTGAAAGTTTCATCATCGTGCAGAAATCTAACTC	914
Db	849	CATCAACTACCGGACCTGTACATCGGTGAAAGTTTCATCATCGTGCAGAAATCTAACTC	908
QY	915	TCAGTCCATCAATGATGACATCGTACGTAAGAGACATACATCTACCTGGAGCTTCTTCAA	974
Db	909	TCAGTCCATCAATGATGACATCGTACGTAAGAGACATACATCTACCTGGAGCTTCTTCAA	968
QY	975	CTGTAATCAGGAATGCGGTGTATACACTTACAAGTACTTCAAGAAAGAAAGAAAAGCT	1034
Db	969	CTGTAATCAGGAATGCGGTGTATACACTTACAAGTACTTCAAGAAAGAAAGAAAAGCT	1028
QY	1035	TTTCCRGGTCGGAATCTGTATTCGCGAGAACTCTACAACACCATCCAGATCAAGAATA	1094
Db	1029	TTTCCRGGTCGGAATCTGTATTCGCGAGAACTCTACAACACCATCCAGATCAAGAATA	1088
QY	1095	CGACGACAGCCGACCTACTCTTCCAGCTGCTGTTCAGAAAGATGAAGAACTCTACTGA	1154
Db	1089	CGACGACAGCCGACCTACTCTTCCAGCTGCTGTTCAGAAAGATGAAGAACTCTACTGA	1148
QY	1155	CGAAATCGGTCGTATCGGTATCCACGGTTCTTACGAATCTGGTATCGTATTCGAAGATA	1214
Db	1149	CGAAATCGGTCGTATCGGTATCCACGGTTCTTACGAATCTGGTATTCGAAGATA	1208
QY	1215	CAGAAGTACTTCTGCATCTCCAATGGTACTCTGAAGAACTTAAACGCAACCGTACAA	1274
Db	1209	CAGAAGTACTTCTGCATCTCCAATGGTACTCTGAAGAACTTAAACGCAACCGTACAA	1268
QY	1275	CTTGAACATGGGTTGCAATTTGGCAGTTATCCGAAAGACGAAGGTTGGACCGCAATAGTA	1334
Db	1269	CTTGAACATGGGTTGCAATTTGGCAGTTATCCGAAAGACGAAGGTTGGACCGCAATAGTA	1328
QY	1335	A 1335	
Db	1329	A 1329	

```

RESULT 6
PCT-US97-15394-45
; Sequence 45, Application PC/TUS9715394
; GENERAL INFORMATION:
;
; APPLICANT: Williams, James A.
; APPLICANT: Thalley, Bruce S.
; TITLE OF INVENTION: Multivalent Vaccine For Clostridium
; TITLE OF INVENTION: Botulinum Neurotoxin
; NUMBER OF SEQUENCES: 82
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States of America
; ZIP: 94104
; COMPUTER READABLE FORM:

```



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; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US97/15394
; FILING DATE:
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: OPD-02304
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 45:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1547 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 108..1523
; PCT-US97-15394-45

Query Match 55.3%; Score 741.2; DB 1; Length 1547;
Best Local Similarity 72.5%; Pred. No. 8.3e-194;
Matches 959; Conservative 0; Mismatches 363; Indels 0; Gaps

QY 10 ATGGCGCAACAATACAATTCGGAAATCCCTGAACAATATCATCTCTGAACCTCGCTTACAAA 69
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 204 ANGTTTAATAATATATAGCGAAATTTTAATATATATATCTTAAATTTAAGATATAG 263

QY 70 GACACAATCTGATCGATCTGTCTGGTTAGGFGCTAAAGTTGAAGTATACGACGGTGT 129
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 264 GATAATAATTTAATAGATTTATCAGGATATGGGCAAGGTAGAGGTATATATGATGGAGTC 323

QY 130 GAACCTGAATGACAAGACCAGTCTCAACCTGACCTCTCCGGTACTCTAAGATCCGTT 189
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 324 GAGCTTAATGATAAATATCAATTTAAATTAACCTAGTTCAGCAATATGTAAGATAGAGTG 383

QY 190 ACTCAGATCAGACATCATCTTCAACTCCGATTCCTGGAACTCTCTGTTTCTCTCTGG 249
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 384 ACTCAAAATCAGAATATCATATTAATAGTGTGTCCTTGATTTTAGCGTTAGCTTTTG 443

QY 250 ATTCTGATCCGGAATACAGAACGCGGTATCCAGATATACATCCACATGAATACACC 309
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 444 ATAAGAATACCTTAATAGAATGATGTATACAAAATTATTCATATGAATATACA 503

QY 310 ATCATCAACTCGATGAAGAATAACTCTGGTTGGAAGATCTCCATCCGGGTAAACCGTATC 369
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 504 ATAATTAATTGATGAAATAATATCCGGCTTGAAATAATCTATTAGGGTAAATAGNTA 563

QY 370 ATCTGGACTCTGATCGATATCAACGCTAAGACCAATCTGTATTTCTTGAATACAAATC 429
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 564 ATATGGACTTTTAATTGATATAAATGGAAGAACCAATCGGTATTTTGAATATACATA 623

QY 430 CGTGAAGACATCTCTGAAATACATCAATCCGTCGTTCTCGTTTACCATCACCAATAACCTG 489
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 624 AGAGAAGATATACAGAGTATATAAATAGATGGTTTTTTTGTAATTAATTTGTAATTTG 683

QY 490 AACAAATGCTAAAAATCTACATCAACGGTAAACTGGAATCTAATACCGACATCAAGACATC 549
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 684 AATAACGCTAAAAATTTATATAATGTTAAGTATAGTATCAAAATACAGATATTTAAAGATATA 743

QY 550 CGTGAAGTTATTCGTAAACGCTGGAATCATCTTCAACCTGGAGCGGTACATCGATCGTACC 609
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 744 AGAGAAGTTATTCGTAAATGTTGGAATTAATTTAATTAATGATGGTGTATATAGATAGACA 803

QY 610 CAGTTTCATCTGGATGAATAACTTCTCCATCTTCAACACCGCAACTGTCTCAGTCCCAATATC 669
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||

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1  RESULT 7
2  US-08-704-159-45
3  ; Sequence 45, Application US/08704159
4  ; GENERAL INFORMATION:
5  ; APPLICANT: Williams, James A.
6  ; APPLICANT: Thalley, Bruce S.
7  ; TITLE OF INVENTION: Multivalent Vaccine For Clostridium
8  ; TITLE OF INVENTION: Botulinum Neurotoxin
9  ; NUMBER OF SEQUENCES: 82
10 ; CORRESPONDENCE ADDRESS:
11 ; ADDRESSEE: Medlen & Carroll
12 ; STREET: 220 Montgomery Street, Suite 2200
13 ; CITY: San Francisco
14 ; STATE: California
15 ; COUNTRY: United States of America
16 ; ZIP: 94104
17 ; COMPUTER READABLE FORM:
18 ; MEDIUM TYPE: Floppy disk
19 ; COMPUTER: IBM PC compatible
20 ; OPERATING SYSTEM: PC-DOS/MS-DOS
21 ; SOFTWARE: PatentIn Release #1.0, Version #1.30
22 ; CURRENT APPLICATION DATA:

```


FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Ingolia, Diane E.
REGISTRATION NUMBER: 40,027
REFERENCE/DOCKET NUMBER: OPD-02304
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 45:
SEQUENCE CHARACTERISTICS:
LENGTH: 1547 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
FEATURE:
NAME/KEY: CDS
LOCATION: 108..1523
SEQUENCE DESCRIPTION: SEQ ID NO: 45:
US-10-271-012-45

Query Match 55.3%; Score 741.2; DB 43; Length 1547;
Best Local Similarity 72.5%; Pred. No. 8.3e-194;
Matches 959; Conservative 0; Mismatches 363; Indels 0; Gaps 0;
QY 10 ATGCCCAACAAATACAAATCCGAATCCCTGAAACATATATCATCTCGAATCGGTACAAA 69
DB 204 ATGTTTAATAATATATAGCGAATTTTAATAATATATATCTTAATAATTAAGATTAAG 263
QY 70 GACAAACATCTGATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 129
DB 264 GATAAATAATTAATAGATTTATCAGGATATGCGGCAAGAGGTATATGATGAGATC 323
QY 130 GAATGAATGACAAAGACAGTTCAACAGTCTCTCGCTGCTGCTGCTGCTGCTGCTGCTG 189
DB 324 GAGCTTAATGATTAATAATCAATTAATTAATTAATTAATTAATTAATTAATTAATTA 383
QY 190 ACTCAGAAATGACAAATATCTTCAATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 249
DB 384 ACTCAAAATCAGAAATATCATATTAATTAATTAATTAATTAATTAATTAATTAATTA 443
QY 250 ATTCGATCCGAAATACAGACAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 309
DB 444 ATAGATATCTTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTA 503
QY 310 ATCATCAATGCAATGAAATACATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 369
DB 504 ATAAATTAATGTAATAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTA 563
QY 370 ATCTGACTGCTGATATACAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 429
DB 564 ATATGGACTTAATGATATAATGAAACCAATCGGTATTTTGAATATACATA 623
QY 430 CGTGAAGACATCTCTGAATACATCAATCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 489
DB 624 AGAAGATATATCAGATATATAATAGATGCTTTTGTAACTATTACTAATAATTG 683
QY 490 AACATGCTAAATCTACATCAACGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 549
DB 684 AATAACCTAAATTTATATTAATGTAAGTACGATCAATACAGATATTAAAGATATA 743
QY 550 CGTGAAGTATCGTACAGGTGAAATCATCTTCAACACTGCGGTGACATCGCTGCTGCTG 609
DB 744 AGAAGTATTGCTTAATGCTGAAATTAATTAATTAATTAATTAATTAATTAATTAATTA 803
QY 610 CAGTTCATCTGATGAAATCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 669
DB 804 CAATTTATTTGGATGAAATTTTCAATTTTCAATTTTCAATTTTCAATTTTCAATTTT 863
QY 670 GAGAACGCTACAGGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 729
DB 864 GAGAAAGATATAAATTTCAATCATATAGCAATTTTAAAGATTTTGGGGAATCTCT 923

QY 730 CTGATGTACACAAAGAAATACATATATGTTCAATGCTGTGTAACAAGAACTCTTACATCAA 789
DB 924 TTAATGTACATAAAGAAATATATATGTTTAAATCGGGAATAAATAATTCATATATATAA 983
QY 790 CTGAAGAAAGACTCTCCGGTGGTGGTGAATCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 849
DB 984 CTAAAGAAAGATTCACCTGTAGTGAATTTTAACACGTAGCAATATATATCAATCAATCT 1043
QY 850 AAATACATCAACTACCGGACCTGTACATCGGTGAAAGTTTCAATCATCATCGTCCGCAATCT 909
DB 1044 AAATATATAAATATAGAGATTTATATATGAGAAATTTTATTAAGAAAGAAAGTCA 1103
QY 910 AACTCTCAGTCCATCAATGATGACATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 969
DB 1104 AATTCATCAATCTAATGATGATATAGTTAGAAAGAGATTTATATATATCTAGATTTT 1163
QY 970 TTCAACCTGAATCAGGAATGGCGTCTATACACCTTACAAAGTACTTCAAGAAAGAAAGAA 1029
DB 1164 TTTAATTTAAATCAAGAGTGGAGATATATACCTATAAATTTTAAAGAAAGAAAGAA 1223
QY 1030 AAGCTTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1089
DB 1224 AATGTTTTAGTCCCTAATAGTGTATCTGATGATTTTACATATCTATACAAATATAA 1283
QY 1090 GAATAGCAACACGACCGACCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1149
DB 1284 GAATATGATGACACGACACATATAGTTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1343
QY 1150 ACTGAGGAATCGGTCTGATCGGTATCCACCGTCTTCTACGATCTGCTGCTGCTGCTGCTG 1209
DB 1344 ACTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1403
QY 1210 GAATCAAAAGATCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1269
DB 1404 GAGTATAAGATTTATTTTGTATAAGTAAATGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1463
QY 1270 TACAACCTGAACCTGGTGGTCAATTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1329
DB 1464 TATAATTTAAATTTGGATGTAATTTGGCAGTTTATCTTAAAGAGTAAAGAGTAAAG 1523
QY 1330 TA 1331
DB 1524 TA 1525

RESULT 9
PCT-US97-15394-41
Sequence 41, Application PC/TUS9715394
GENERAL INFORMATION:
APPLICANT: Williams, James A.
APPLICANT: Thalley, Bruce S.
TITLE OF INVENTION: Multivalent Vaccine For Clostridium
TITLE OF INVENTION: Botulinum Neurotoxin
NUMBER OF SEQUENCES: 82
CORRESPONDENCE ADDRESS:
ADDRESSEE: Medlen & Carroll
STREET: 220 Montgomery Street, Suite 2200
CITY: San Francisco
STATE: California
COUNTRY: United States of America
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US97/15394
FILING DATE:
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Ingolia, Diane E.
REGISTRATION NUMBER: 40,027

; INFORMATION FOR SEQ ID NO: 41:

[illegible]

SEQUENCE CHARACTERISTICS:
 LENGTH: 3876 base pairs
 TYPE: nucleic acid
 STRANDEDNESS: double
 TOPOLOGY: linear
 MOLECULE TYPE: DNA (genomic)
 FEATURE:
 NAME/KEY: CDS
 LOCATION: 1..3873
 US-08-704-159-41

Query Match 55.3%; Score 741.2; DB 11; Length 3876;
 Best Local Similarity 72.5%; Pred. No. 1.3e-193;
 Matches 959; Conservative 0; Mismatches 363; Indels 0; Gaps 0;

QY 10 ATGGCCACAAATACAAATCCGAATCTGCTGGTTACGGTGTCTAAAGTTGAAGTATACGACGGTGT 129
 DB 2554 ATGTTTAAATATAATAGGAAATTTAAATATAATATATCTTAAATTTAAAGATATAAG 2613

QY 70 GACAAATCTGATCGATCTGCTGGTTACGGTGTCTAAAGTTGAAGTATACGACGGTGT 129
 DB 2614 GATAATAATTTAATAGATTTATCAGGATATCGGCAAGGTAGAGGTATATGATGNGTC 2673

QY 130 GAACGTGATGACAAAGACAGTTCAACCTGACCTCTCCGCTAACTCTTAAGATCCGGTGT 189
 DB 2674 GAGCTTAATGATATAAATCAATTTAAATTAATCTAGTTTCAGCAATAGTAAAGATTAGTG 2733

QY 190 ACTCAGAAATCAGAAATCATCTTCAACTCCGCTATTCCTGGACTTCTCTGTTCTCTGG 249
 DB 2734 ACTCAAAATCAGAAATCATATTTAATAGTGTCTCTGTTTACGGTTAGCTTTGG 2793

QY 250 ATTCGATCCCGAAATACAAAGACGCGTATCCAGAAATTTACATCCCAATGAATACAC 309
 DB 2794 ATAAGAATACCTAAATATAAAGAAATGATGGTATACAAATATATATTCATATGAATACA 2853

QY 310 ATCTCAACTGCTCAGAAATCACTCTGGTTGGAGATCTCCATCCGCGGTAAACCGTATC 369
 DB 2854 ATAAATATGTTGTAAGAAATTAATTCGGCTGGAATATCTATTAGGGTATAGGATA 2913

QY 370 ATCTGACTCTGATCGATATCAACGCTGAAGACCAATCTGTTATCTCGAATACACATC 429
 DB 2914 ATATGACTTTAATTTGATATAAATGAAATACCAATCGGTATTTTGAATATAACATA 2973

QY 430 CGTGAGACATCTCTGAATACATCAATCGTGGTTCTCTGTTTACCATCACCATAACCTG 489
 DB 2974 AGAGAAGATATATCAGAGTATATAAATAGATGGTTTGTGTAATATCTACTAATAATTG 3033

QY 490 ACAAATGCTAAATCTACATCAACGCTGAACTGGAATCTAATACCGGACATCAAGACATC 549
 DB 3034 AATAAGCTTAAATTTATATTAATGTAAGCTAGATCAATACAGATATTAAGATATA 3093

QY 550 CGUGAATGTTATCGCTAACGGTGAATCATCTTCAAACTGGACGGTGAATCGATCGTACC 609
 DB 3094 AGAGAAGTTAATTCCTAATGGTGAATATAATTTAAATAGATGGTGAATAGATAGAA 3153

QY 610 CAGTTCATCTGGATGAATACATCTCTCCATCTTCAACACCGAACTGCTCAGTCCAATATC 669
 DB 3154 CAATTTATTTGGATGAAATTTTACGATTTTATACGGAAATTAAGTCATCAATATT 3213

QY 670 GAAGAAGGTACAGATCCAGTCTTACTCCGAATACCTGAAAGACTTCTGGGGTAAATCCG 729
 DB 3214 GAAGAAGATATAAATTTCAATCATATAGCGAATATTTAAAGATTTTGGGGAATCTCT 3273

QY 730 CTGATCTACAAGAAATACATATATGTTCAATCTGCTGATACAGAACTCTTACATCAA 789
 DB 3274 TTAATGTCAATAAAGAAATTTATATGTTTAAATGGGGAATAAATATCATATATAA 3333

QY 790 CTGAAGAAAGACTCTCCGGTTGGTGAATCTGACTCTGCTTCCAAATACACAGAACTCT 849
 DB 3334 CTAAGAAGAGATTACCTCTGAGTGAATTTTAAACAGCTAGCAATATATCAAAATCT 3393

QY 850 AATACATCAATCTACCGGCTGATCTGTTGAAATGTTCAATCTGAAATGTTCAATCTCGGCAATCT 909

RESULT 11
 US-10-271-012-41
 ; Sequence 41, Application US/10271012
 ; GENERAL INFORMATION:
 ; APPLICANT: Williams, James A.
 ; Thalley, Bruce S.
 ; TITLE OF INVENTION: Multivalent Vaccine For Clostridium
 ; Botulinum Neurotoxin
 ; NUMBER OF SEQUENCES: 82
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Medlen & Carroll
 ; STREET: 220 Montgomery Street, Suite 2200
 ; CITY: San Francisco
 ; STATE: California
 ; COUNTRY: United States of America
 ; ZIP: 94104
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patent in Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/10/271.012
 ; FILING DATE: 15-Oct-2002
 ; CLASSIFICATION: <Unknown>
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/704.159
 ; FILING DATE: <Unknown>
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Ingolia, Diane E.
 ; REGISTRATION NUMBER: 40,027
 ; REFERENCE/DOCKET NUMBER: OPND-02304
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (415) 705-8410
 ; TELEFAX: (415) 397-8338
 ; INFORMATION FOR SEQ ID NO: 41:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 3876 base pairs

DB 3394 AAATATATAAATTTATAGAGATTTATATATTGGAGAAAAATTTATTTATAGAGAAAAAGTCA 3453

QY 910 AACTCTCAGTCCATCAATGATGACATCGTAGCTAGTAAAGAGACATCTACCTGGACTTC 969

DB 3454 AATCTCAATCTATAAATGATGATATAGTTAGAAAAAGAGATTATATATATCTAGATTTT 3513

QY 970 TTCAACCTGAATCAGGAATGCCGTGTATACACCTACAGTACTTCAGAGAAAGAGAGAA 1029

DB 3514 TTTAATTTAAATCAAGAGTGGAGAGTATATACCTATAAATTTTAAAGAAAGAGAGAA 3573

QY 1030 AAGCTTTCCCTGGCTCCGATCTCTGATTCGGACGAATCTACACCACTCCAGATCAAA 1089

DB 3574 AAATGTTTGTAGTCCCTATTAAGTGAITTCGTAGTGGTTTACAACTACTATACAAATAAAA 3633

QY 1090 GAATPACGACGACACCCGACCTACTCTTCCAGCTGCTGTTCAGAGAAATGAAGAACT 1149

DB 3634 GAATATGATGACAGCCCAACATATAGTTGTGCTGCTTTTAAAAAAGATGAAGAACT 3693

QY 1150 ACTGACGAAATCGGTCTGATCGGTATCCACCGTTTCTACGAATCTGATTCGATTCGAA 1209

DB 3694 ACTGATGATAGGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 3753

QY 1210 GAATACAAAGACTACTCTGATCTCCAAATGTTACCTGAAGNACTTAAACGCAACCG 1269

DB 3754 GAGTATAAGATTTATTTGTTATAGTAAATGGTACTTAAAGAGGTAAAGAGAAACCA 3813

QY 1270 TACAACCTGAAACTGGGTGCAATTTGGCAGTTCATCCGAAAGACGAAAGTTCGACCGAA 1329

DB 3814 TATAATTTAAATTTGGGATGTAATTTGGCAGTTTATCTTAAAGATGAAGGTGACTGAA 3873

QY 1330 TA 1331

DB 3874 TA 3875

```

; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 1..3873
; SEQUENCE DESCRIPTION: SEQ ID NO: 41:
US-10-271-012-41

Query Match          55.3%; Score 741.2; DB 43; Length 3876;
Best Local Similarity 72.5%; Pred. No. 1.3e-193;
Matches 959; Conservative 0; Mismatches 363; Indels 0; Gaps 0

QY 10 ATGCGCAACAATCAAAATTCGAAATCCTCGAACCAATATCATCTTGAACCTCGCGTTACAAA 69
   |||||
DB 2554 ATCTTTAATAATAATAGCGAAATTTTAAATAATATATCTTTAAATTTAAGATATAAG 2613

QY 70 GACACAATCTGATCGAAGTCTCTGGTTACGGTGCTAAAGTTGAAGTATACGACGGTGTT 129
   |||||
DB 2614 GATAATAATTTAATAGATTTATCAGGATATGGGCAAGGTAGAGGTATGATGAGGATC 2673

QY 130 GAAGTGAATGACAAGAACCGAGTTCAAACTGACCTCTTCGCGTAACTCTAAGATCCGTTGTT 189
   |||||
DB 2674 GAGCTTAATGATAAAATCAATTTAAATTAAGTCTAGTCAGCAAAATAGTAAGATTAGAGTG 2733

QY 190 ACTCAGAATCAGAGATCATCTTCAACTCCGTTATCTCGGACCTCTCTGTTTCTCTCTCG 249
   |||||
DB 2734 ACTCAAAATCAGAAATCATATTTAATAGTGTGTTCTTGTAATTTACGGTTAGCTTTGG 2793

QY 250 ATTCTGATCCCGAAATPACAAGACGACGATCCAGAAATTACATCCACAATGAATACACC 309
   |||||
DB 2794 ATAGAATACCTAAATATAAGAAATGATGGTATACAAAATTTATATTCATAATGAATATACA 2853

QY 310 ATCATCAACTCGATGAGAAATACACTCTGTTGGAGATCTCCATCCGCGGTACCCGTTATC 369
   |||||
DB 2854 ATAAATTAATTTGTAAGAAATTAATTCGGCTGGAATATCTATTAGGGGTATATAGATA 2913

QY 370 ATCTGGACTCTGATCGATATCAACCGTAAAGCAAAATCTGTTATCTTCGAAATACAACATC 429
   |||||
DB 2914 ATATGGACTTTAATTTGATATAATGAAAGAAACCAATCCGTTATTTTGAATATAACATA 2973

QY 430 CGTGAAGACATCTCTCAATACATCAATCGCTGGTTCTTCGTTACCATCACCAATAAACCCTG 489
   |||||
DB 2974 AGAGAATATATCAGAGTATTAATAGATGGTTTTTGTGAATTAATTAATTAATTTG 3033

QY 490 AACAATGCTTAAATCTACATCAACCGTAAACGTTAAATCTAATACCGACATCAAAAGACATC 549
   |||||
DB 3034 AATAACGCTTAAATTTATATTTAATGTAAGCTAGTAATCAAAATACAGATATTAAGAAGATA 3093

QY 550 CGTGAAGTTATCGCTAACGCTGAATATCATCTTCAAACTGGACGGTGACATCGATCGTACC 609
   |||||
DB 3094 AGAGAACTTATTCCTAATGGTGAATATATTTAAATTAGATGGTGATATAGATAGAAACA 3153

QY 610 CAGTTCATCTGGATGAATACTTCTCCATCTTCAACACCGCAACTGTCTCAGTCCAAATATC 669
   |||||
DB 3154 CAATTTATTTGGATGAATATTTTCAGTATTTTAAATACGGAAATTAAGTCAATCAAAATATT 3213

QY 670 GAAGAACGGTACAAGATCCAGCTTTACTCCGAATACCTGCAAGACTCTCTGGGGTAATCCG 729
   |||||
DB 3214 GAAGAAGATATTAATTCATCATATACGGAATTTTAAAGATTTTTTGGGGAAATCTCT 3273

QY 730 CTGATGTACAACAAGAATACTATATGTTTCAATGTGGTAAACAAGAAGCTCTTTACATCAAA 789
   |||||
DB 3274 TTAATGTACAATAAAGAAATTTATATGTTTAAATGCGGGGAATAAAAATTTTCATATATTA 3333

QY 790 CTGAAGAAGACACTCCCGTGGTGGTGAATCTCGTACTCTCGTTCCAATACACACCAAGCTCT 849
   |||||
DB 3334 CTAAGAAGAAAGATTCACTCTGAGTGGAAATTTTAAACAGTACGCAAAATATATCAAAATCT 3393

QY 850 AAATACATCAACTACCGGACCTGTATACATCGGTGAAAGTTTCATCATCCGTCGCAAAATCT 909
   |||||
DB 3394 AAATATATAAATATAGAGATTTATATATTTGGAGAAATATTTATTAAGAAGAAGAGTCA 3453

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QY	910	AACTCTAGTCGCAATGATGACATCGTAGCTAAAGAAGACTACATCTTACCTGGACTTC	969
Db	3454	AATTCTCAATCTATAAAATGATGATAGTTTAAAGAAGAGATTATATATATCTAGATTTT	3513
QY	970	TTCAACCTGAATCAGGAATGGCGTCTATACACCTACAAGTACTTCAAGAAGAAGAGAA	1029
Db	3514	TTTAAATTTAAATCAAGATGGAGAGTATATACCTATAAATATTTTAAAGAAGAGAA	3573
QY	1030	AAGCTTTTCTGCTCCGATCTCTGATTCGAGCAGACTCTACACACGATCCAGATCAAA	1089
Db	3574	AAATGTGTTTTAGTCTCTATAAGTATGATCTGATGAGTTTTCACATACTATACAAATAAA	3633
QY	1090	GAATACGAGCAACAGCGGACCTACTCTTGCCAGCTGCTGTTCAAGAAGAAGATGAAGATCT	1149
Db	3634	GAAATATGATGAACGACCCACATATAGTTGTCAAGTGCCTTTTAAAGAAGATGAAGAA	3693
QY	1150	ACTGACGAAATCGGTCGTATCGGTATCCACCGTTTCTACGAAATCTGATTCGATTCGAA	1209
Db	3694	ACTGATGAGATAGGATTTGGTATTCATGCTTCTACGAAATCTGGAATTTGATTTGAA	3753
QY	1210	GAATACAAAGACTACTCTTGATCTCCAAATGGTACCTGAAGGAAGTTAAACGCAACCG	1269
Db	3754	GAGTATAAGATTATTTTGTATAGTAAATGGTACTTAAAGAGSTTAAAGAAGAACCA	3813
QY	1270	TACAACCTGAACATGGTTGCCAATTGGCAGTTTCATCCGAAAGACGAAAGGTTGGACCGAA	1329
Db	3814	TATAAATTTAAATATGGGATCTAATTTGGCAGTTTATTCTCTAAAGATGAAGGGTGGACTGAA	3873
QY	1330	TA 1331	
Db	3874	TA 3875	
RESULT 12			
US-09-730-237-3			
; Sequence 3, Application US/09730237			
; GENERAL INFORMATION:			
; APPLICANT: Walker, Patricia			
; TITLE OF INVENTION: Methods of Treating Hyperhidrosis			
; FILE REFERENCE: 2933			
; CURRENT APPLICATION NUMBER: US/09/730,237			
; CURRENT FILING DATE: 2000-12-05			
; NUMBER OF SEQ ID NOS: 12			
; SOFTWARE: PatentIn Ver. 2.1			
; SEQ ID NO 3			
; LENGTH: 3876			
; TYPE: DNA			
; ORGANISM: botulinum toxin			
US-09-730-237-3			

	Query Match	54.9%	Score 736;	DB 29;	Length 3876;
	Best Local Similarity	72.2%;	Pred. No. 3.4e-192;		
	Matches 955;	Conservative	1;	Mismatches 366;	Indels 0; Gaps 0;
QY	10	ATGCCAACAAATACAAATCCGAAATCCTCGAACATAATCATCCTGAACCTGGTTCACAAA	69		
Db	2554	ATGTTTAATAAATATATAATACGAAATTTTAATAATATATTCTTAAATTTAAGATATAAG	2613		
QY	70	GACAACAATCTGATCGATCTGTCTGGTTACGGTGCTAAAGTTGAAGTATACGACGGTGT	129		
Db	2614	GATAATAATTTATAGATTATTCAGGATATGGGCAAGGTAGAGTATATGATGGAGTC	2673		
QY	130	GAACTGAATCACAGAACCAGTTCAAACTGCACCTTCCTCCGCTAACTCTAAGATCCCCTGT	189		
Db	2674	GAGCTTAATGATAAAAAATCAATTTAAATTAAGTAGTTACGAAATAGTAGATTAAGAGIG	2733		
QY	190	ACTCAGAATCAGAACATCATCTTCAACTCCGTTATCCCTGGACTTCTCTGTTTCTCTCTCG	249		
Db	2734	ACTCAAATCAGAAATCATATTTAATAGTGTGTTCCCTTGATTTTTACGGTTAGCTTTGG	2793		
QY	250	ATTGCGTATCCGAAAAATACAGAACGACGGTATCCAGAAATTACATCCCAATGAATACACC	309		

Db 2794 ATAAGAACTCTAAATATAGAAATGATGGTATACAAAATTATATTCATAAATCAATATACA 2853
QY 310 ATCATCACTGCAATGAAGAATAAATCTCTGTTGGAGAACTCCATCCGGGTAAACCGTATC 369
Db 2854 ATAATTAATTTGTAAGAAATAATTCGGGCTGAAATATCTATTAGGGTAAATAGGATA 2913
QY 370 ATCTGGACTCTGATCATCAACGGTAAGACAAATCTGTTCTTCCGATCAACAATC 429
Db 2914 ATATGGACITTAATTCGATTAATGAAAGAAACCAATCCGGTATTTTGAATATACATA 2973
QY 430 CGTGAAGACATCTCTGAATACATCAATCCGCTGTTCTGTTTACCATCACCATAACCTG 489
Db 2974 AGAAGAGATATACAGAGTATATAAATAGATGGTCTTTTGTAACTATTACTAATATTG 3033
QY 490 AACAACTCTAAATCTACATCAACGGTAACTGGAATCTAAACCGACATCAAGACATC 549
Db 3034 AATAACGCTAAATTTATTAATGTTAGCTAGATCAATACAGATATTAAAGATATA 3093
QY 550 CGTGAAGTATTCGCTAACCGTGAATATCTCTCAACATCGGAGCGGTGACATCGATACC 609
Db 3094 AGAAGAGTATTAATGCTAATGCTGAAATATTAATTAATTAAGTGGTATAGATAGAAACA 3153
QY 610 CAGTTCATCTGGATGAATATCTCATCTTCAACACCGAACTGCTCAGTCCGAATATC 669
Db 3154 CAATTTATTTGGATGAATATTTTCAGTATTTTAAATACGGAATTAAGTCAATCAATATT 3213
QY 670 GAAGACGGTACAGATCCAGTCTTACTCCGAATACCTCGAAAGACTTCTGGGTAAATCCG 729
Db 3214 GAAGAAAGATATAAATCTCAATATAGCGAATATTTAAAGATTTTGGGAAATCCT 3273
QY 730 CTGATGTACAAAGAAATACATATATTTCAATGCTGTTGTAACAGAACTCTTACATCAA 789
Db 3274 TTAATGTAGAAATAAAGAAATATTAATGTTTAAATGCGGGAATATAAATTCATATTA 3333
QY 790 CTGAAGAAAGACTCTCGGTTGTTGAAATCTCGACTCGTTCCTCAAAATCAACACGAACTCT 849
Db 3334 CTAAAGAAAGACTCTCACTGTAGTGAATTTTAAACAGGTAGCAATATAATCAAAATCT 3393
QY 850 AATACATCAACTACCGGACCTGTACATCGGTGAAAGATTTTATCATCTCGGTAATCT 909
Db 3394 AAATATATAAATATAGAGATTTATATATTTGGAGAAATTTTATTAAGAAAGAAAGTCA 3453
QY 910 AACCTCTCAGTCCATCAATGATGATGATAGTATAGTTAGAAAGAGATATATATCTAGATTT 3513
Db 3454 AATCTCAATCTATAATGATGATATAGTTAGAAAGAGATATATATCTAGATTT 3573
QY 970 TTCAACTGAAATCAGGAATCGGTGTATACCTCAAGTACTCTCAAGAAAGAAAGAA 1029
Db 3514 TTTAAATTAATCAAGAGTGGAGATATATACCTATAAATATTTTAAAGAAAGAGAA 3573
QY 1030 AAGCTTTTCTGCTCGATCTCTGATTCGGAGAACTCTCAACACCACTCCAGATCAA 1089
Db 3574 AATTTGTTTTAGCTCTATAAGTGAATCTGTAGATGTTTTAGAACTATACAAATAAA 3633
QY 1090 GAATACAGCAACAGCGGACTACTCTTCCAGCTGCTGTTTCAAGAAAGATCAAGAACT 1149
Db 3634 GAATGATGAACAGCCACATATATTTCTGCTGCTTTTAAAGAAAGATGAAGAAAGT 3693
QY 1150 ACTCAGAAATCGTCTGATCGGTATCCACCGTTTCTACGAACTCTGATCTGATTCGAA 1209
Db 3694 ACTGATGAGATGAGATTGATGTTATTCATCGTTTCTAGAACTCTGGAATGTTTGA 3753
QY 1210 GAATACAAAGACTACTTCTGCATCTCCAATGGTACTCTGAAGAAAGTTTAAACGCAACCG 1269
Db 3754 GAGTATAAGATATTTTCTGATTAAGTAAATGGTATTAAGAGAGGTAAAGAAAGAAACA 3813
QY 1270 TACAACCTGAACTGGTTCGATTTGGCAGTTCATCCCGAAAGACCGAGGTTGGACGNA 1329
Db 3814 TATAAATTTAAATTTGGGATGTAATGGCAGTTTATTTCCTAAGAGATGAAGGGTGGACTGAA 3873
QY 1330 TA 1331
Db 3874 TA 3875

RESULT 13

US-10-051-952-3
; Sequence 3, Application US/10051952
; GENERAL INFORMATION:
; APPLICANT: Walker, Patricia
; TITLE OF INVENTION: Methods of Administering Botulinum Toxin
; FILE REFERENCE: 2933CIP
; CURRENT APPLICATION NUMBER: US/10/051,952
; CURRENT FILING DATE: 2002-01-17
; PRIOR APPLICATION NUMBER: 09/730,237
; PRIOR FILING DATE: 2000-12-05
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 3
; LENGTH: 3876
; TYPE: DNA
; ORGANISM: botulinum toxin
US-10-051-952-3

Query Match 54.9%; Score 736; DB 39; Length 3876;
Best Local Similarity 72.2%; Pred. No. 3.4e-192;

Matches 955; Conservative 1; Mismatches 366; Indels 0; Gaps 0;

QY 10 ATGCCCAACAATACAAATCCGAAATCCGAAACAATATCATCTCGAACCTCGGTACAAA 69
Db 2554 ATGTTTAAATAATATATAGCGAAATTTTAAATAATATATATCTTAAATTTAAGATATAAG 2613
QY 70 GACAACAATCTGATCGATCTGCTGTTTACGGTCTAAAGTTGAAGTATACACGCTGTT 129
Db 2614 GATATAATTTAATAGATTTATCAGATATGCGGCAAGGTAGAGGTATATGATGAGATC 2673
QY 130 GAACTGAATGACAAAGAACCGAGTCAAACTGACCTCTTCGGTAACTCTAAGATCCGTT 189
Db 2674 GAGCTTAATGATAAAAATCAATTTAAATTAAGTCTAGTCTAGCAAAATAGTAAGATTAGAGT 2733
QY 190 ACTCAGAACTCAGAACTCATCTTCAACTCCGTTATCTCTGAGCTTCTGTTTCTCTCGG 249
Db 2734 ACTCAAAATCAGAAATATCATATTTAATAGTGTCTTCTGATTTTAGCGTTAGCTTTGG 2793
QY 250 ATTCTGATCCCGAAATACAAGACGAGTATCCAGAAATATACATCCAAATGAATACACC 309
Db 2794 ATAAGAACTCTAAATATAGAAATGATGTTATACAAATATATATTCATAATGAATATACA 2853
QY 310 ATCATCACTCTGATGAGAAATACCTGTTGGAAGTCTCCATCCGCGTAAACCGTATC 369
Db 2854 ATAATTAATTTGATGAAATTAATTCGGCTGGAAATATCTATTAGGGGTAAATAGGATA 2913
QY 370 ATCTGACTCTGATCGATATCAACGGTAAGACCAAAATCTGTTCTTCCGAATACAAATC 429
Db 2914 ATATGACTTTAATTCATATAAATGGAAACCAAAATCGGTATTTTGAATATAACATA 2973
QY 430 CGTGAAGACATCTCTGAATACATCAATCCGTTCTGTTTACCATCACCATAACCTG 489
Db 2974 AGAAGAGATATACAGAGTATATAAATAGATGGTCTTTTGTAACTATTACTAATATTG 3033
QY 490 AACAACTCTAAATCTACATCAACGGTAACTGGAATCTAAATCCGACATCAAGACATC 549
Db 3034 AATAACGCTAAATTTATTAATGTTAGCTAGATCAATACAGATATTAAAGATATA 3093
QY 550 CGTGAAGTATTCGCTAACCGTGAATATCTTCAAACTGGAGCGGTGACATCGATCGTACC 609
Db 3094 AGAAGAGTATTCGCTAATGCTGAAATTAATTTAAATTAAGTGGTATAGATAGAAACA 3153
QY 610 CAGTTCATCTGGATGAATATCTCTCCATCTTCAACACCGAACTCTCTCAGTCCCAATATC 669
Db 3154 CAATTTATTTGGATGAATATTTTCAATATTTTAAATCGGAATTAAGTCAATCAATATT 3213
QY 670 GAAGACGGTACAGATCCAGTCTTACTCCGAATACCTCCGAATACCTGAAAGACTTCTGGGGTAAATCCG 729
Db 3214 GAAGAAAGATATAAATTTCAATCATATAGCAATATTTAAAGATTTTGGGAAATCCT 3273

QY	730	CTGATGTACACAAGAATACTATATGTTCAATGCTGGTAAACAAGAAGCTCTTACATCAAA	7899
DB	3274	TTAAATGTAGAATAAAGAATATATATGTTTAAATCGGGGAATAAAAAATTCATATATAAA	3333
QY	790	CTGAAGAAGACTCTCCGGTGGTGAATCTCGTGTCCAAATACAACCCAGAAGCTCT	849
DB	3334	CTAAAGAAAGATTCACTGTAGGTGAAATTTTAAACAGTACCAATATATAATCAAAATCT	3393
QY	850	AAATACATCAACTACCGGACCTGTACATCGGTGAAAAGTTTCATCATCCGTGCGAAATCT	909
DB	3394	AAATATATAAATATAGAGATTATATATTGGGAAAATTTATATAAGAAAGAAAGTCA	3453
QY	910	AACCTCAGTCCATCAATGATGACATCGTAGCTAAGAAGACTACATCTACCTGGACTTC	969
DB	3454	AAATCTCAATCTATAAATGATGATAGTTTAGAAAAGAAGATTATATATCTAGATTTT	3513
QY	970	TTCAACCTGAATCAGGAATGGCTGTATACACCTACAAGTACTTCAAGAAGAGGAAGAA	1029
DB	3514	TTTATTTAAATCAGAGTGGAGAGTATATACCTATATAATTTTAAAGAAGGAGAA	3573
QY	1030	AGCTTTTCTCGCTCCGATCTCTGATTCGACGAACTCTTACAACACCATCCAGATCAAA	1089
DB	3574	AAATTGTTTTTACCTCCTAAGTAGTGAATCTGATGAGTTTAGAATATCTACAATATAAA	3633
QY	1090	GAATACGCGAAACGCGACCTACPTTTGCCAGCTGCTGTTCAAGAAGAGATGAAGAATCT	1149
DB	3634	GAATATGATGAACGCCACACATATATSTTGTTCAGTTGCTTTTAAAAAGATGAAGAA	3693
QY	1150	ACTGAGAAATCGGTCTGATCGGTATCCACCGTTTCTACGAATCTGGTATCGTATTCGAA	1209
DB	3694	ACTGATGAGATAGGATTGATGGTATTCATCGTTTCTAGGAATCTGGAATGTGATTGAA	3753
QY	1210	GAATACAAAGACTACTCTGCACTCCAAATCGGTACCTGAAGGAAGTTAAACGCAACCG	1269
DB	3754	GAGTATAAGATTATTTTGTATAAGTAAATGGTAGTTAAAGAGGTAAAAAGGAAACCA	3813
QY	1270	TACAACCTGAACCTGGGTGCATTTGGCAGTTTCATCCCGAAGACGAGGTTCGACCGAA	1329
DB	3814	TATATTTAAATTTGGGATGTAATTTGGCAGTTTATCTCTAAGATGAAGGGTGGACTGAA	3873
QY	1330	TA 1331	
DB	3874	TA 3875	

RESULTS

RESULTS 14
UIS-09-547-188-3

US-09-347-168-3
: Sequence 3: Application US/09547188: sequence 3, Applical.
: GENERAL INFORMATION:

APPLICANT: Kadkhodavan, Saloumeh

APPLICANT: Balhorn, Rod

; TITLE OF INVENTION: Chimeric Biotoxins for Int

FILE REFERENCE: 17530-742 BIOTOXIN SEQ L

; CURRENT APPLICATION NUMBER: US/09/547,188

; CURRENT FILING DATE: 2000-04-11

; NUMBER OF SEQ ID NOS: 14

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; SOFTWARE: PatentIn Ver. 2.0

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; SEQ ID NO 3
; LENGTH: 40

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; LENGTH: 40
; TYPE: DNA

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TYPE: DNA
ORGANISM: Clostridium botulinum

ORGANISM: C
ITS-09=547=188=3

3-08T-14C-60-20

Query Match 49.58: Score 663.4: DB 21: Length 4051:

Best Local Similarity 68.5%; Pred. No. 4.4e-172;

Matches 916; Conservative 0; Mismatches 421;

QY 3 ATTCAGATGGCCACAAATACAAATCCGAAATCCTGAACAATATCATCTCTGAACCTGCG 62

1

Db 2643 AATAAAATATTTAATAATATAATAGCGAAATTTTAAATAATATCTTAAATTTAAG 27

63 TTACAAGACAAATCTGATCGATCTGTCTGTTACGGTGCTAAAGTTGAAGTATACGA 12 QY

[illegible]

2703	ATATAGAGATAATAA	TTAATAAGATT	TTATCAGGATATGGAGCAAGGTACAGGTATATGA	2766		
123	CGGTGTTGAAC	TGAATGACAGACCA	CGAGTTCAAACTGACCTCTTC	CCGCTAAC	TCTAAGAT	182
2763	TGGGGTCAAGCT	TAAATGATAAA	ATCAATTTAAATTA	CTA	CTAGTTCACAGATAGATAGAT	2822
183	CGGTGTTACTCAG	AATCAGAACATCAT	CTTCAACTCCGTAT	TCTCGACATCTCTGTTC	242	
2823	TAGAGTCAC	TCAAAATCAGAA	TATTTATTTAATAGTATG	TCTCTCTGATTTAGCGTTAG	2882	
243	CTTCTGGATTC	GTATCCCGAATAC	ACAAGACGCGGTATCC	GAAATACAT	CCACAAATGA	302
2883	CTTTTGGAT	TAAGGATACCTTA	ATAATAGGATGATATAC	AAAATTTATTT	TCATANTGA	2942
303	ATACCACTCAT	CAACTGCATGA	GAAGAAATAACTCTG	TGGTGGAGATC	CCATCCGCGGTAA	362
2943	ATATAGCA	TAATTTGTTATG	AAAAAATAATTC	AGGCTGGAAAAATATCT	TATTAGGGGTAA	3002
363	CGGTATCATCT	CGACTCTGATCG	GATATCAACGGTA	AGACCAAAATCTGTAT	TCTCGAATA	422
3003	TAGGATAAT	TGGACCTTAA	TTGATATAAT	TGGAAAAACCAAT	CACTATTTTGNATA	3062
423	CAACATCCGT	GGAACATCTG	GAATACATCAAT	CGTGGTCTTC	GTACCATCACCA	482
3063	TAACATAGAGA	GAAGATATATC	AGATATATAAAT	TAGATGGTTTTT	TCTAACTATTACTAA	3122
483	TAACCTGGA	CAATGCTAAA	ATCTACATCAACGGT	AAACTGGAATCT	TAATACCGACATCAA	542
3123	TAA	TTTGGATATGCT	AAAAATTTATTTA	TATTAATGGCACG	TTAGAAATCATATG	3182
543	AGACATCCGT	GGAAGTTATCG	CTAAGCGGTGA	AAATCATCTTCA	AACTGGACCGTGACATCGA	602
3183	AGATATAGAGA	GAAGTATTTG	TTAATGGTCA	AAATACATTTAAAT	TAGATGGTATGATGA	3242
603	TGCTACCCAG	TTCACTCGATGA	AAATACTTCTCATCT	TCAACACCGAACT	TGCTCACTC	662
3243	TAGA	CACAAATTTAT	TGGTCAATATTT	TAGTATTTT	TATACGCAATTA	3302
663	CAATATCGA	AGACCGGTAC	AGATCCAGTCTT	ATCCGCAATCTG	AAAGACATCTCGGG	722
3303	AAATATTA	AGAGATATATA	AAAAATTC	AAATCATATAG	CGAAATCTTAA	3362
723	TAATCGCTG	TGTGTACAACAA	GAATACTATATG	TCTCAATCTGGT	TACAAGAACTCTTA	782
3363	AAATCCTTT	AAATGATATA	AGAAATATATATG	TTTAA	TCCGGGGAATAAAATTCATA	3422
783	CATCAAACT	GAAAGAGATCT	CCGGTGGTGA	AAATCTGACTCG	TCTTCCAAATACAA	842
3423	TATTAACAT	AGTGAAGATTC	ATCTGTAGTGA	AAATATAATAC	TAGTACAAATATAATCA	3482
843	GAACTCTAA	ATACATCACTAC	CGGACCTGTAC	ATCGTGGTGA	AAAGTTTCATCATCCGCTCG	902
3483	GAA	TTCCAAATATATA	AAATATAG	AAATTTATAT	TTCGGAGAAATTTAT	3542
903	CAAACTAA	CTCTCAGTCC	CAATCATGAC	ATCTAGTAA	AGAGACATCATCTACCT	962
3543	AGAGTCAAA	TTCTCAATCTAT	AAATGATGATAG	TAGTTAGAAA	GAAGATTAATATACATCT	3602
963	GGACTTCT	CAACCTGA	ATCAGGAATGG	CGTGTATAC	ACCTACAGTACTTCA	1022
3603	AGATTTGG	TACTTCCAC	CTGAAGTGG	AGAGTATATGCC	TTATAATTTTAG	3662
1023	AGAAGAAA	AGCTTTTCT	CGGCTCGGATCT	CTGATTCG	ACGAACTCTACAA	1082
3663	GGAA	GAANAATCTG	TTTATCTATTA	AGTGATTTCT	AATGAATTTTATA	3722
1083	GATCA	AGAAATACG	AGCAACGCG	CTACTCTTGC	CGAGTGTGTTCA	1142
3723	AAATA	AGAAATATGAT	GAACGCCATCAT	ATAGTTGT	CGTTGCTTTTAA	3782
1143	AGAATCT	ACTGAC	GAATCGG	TCTGATCCG	GTATCCAG	1202
3783	AGAA	AGTACTGAT	GATAGGATG	TGATGTTATTC	ATCGTTCTAC	3842

QY 1270 TACAACCTGAACTGGTTCGAATTGCGAGTTCATCCGGAAGACGAGGTTGGACCGAA 1329
Db 1464 TATACTCAAAATTGGGATGTAATTGGCAGTTTATTCCTAAAGATGAAGGTTGGACTGAA 1523

QY 1330 TA 1331
Db 1524 TA 1525

Search completed: November 1, 2002, 08:15:27
Job time : 3301 secs

Sequence 1568, Appl
Sequence 2358, Appl
Sequence 930, Appl
Sequence 1289, Appl
Sequence 43, Appl
Sequence 535, Appl
Sequence 441, Appl
Sequence 968, Appl
Sequence 1704, Appl
Sequence 2608, Appl
Sequence 113, Appl
Sequence 44, Appl
Sequence 2784, Appl
Sequence 1309, Appl
Sequence 2281, Appl
Sequence 1351, Appl
Sequence 1162, Appl
Sequence 23, Appl

ALIGNMENTS

RESULT 1
US-10-085-198-111
; Sequence 111, Application US/10085198
; GENERAL INFORMATION:
; APPLICANT: Alsobrook et al.

;
; AFFILIATION: ABBOTT LABORATORIES, CHICAGO, ILL.
; TITLE OF INVENTION: PROTEINS AND NUCLEIC ACIDS ENCODING SAME

SUMMARIES

```

/ PRIOR APPLICATION NUMBER: 00/277,524
/ PRIOR FILING DATE: 2001-03-20
/ PRIOR APPLICATION NUMBER: 60/286,096
/ PRIOR FILING DATE: 2001-04-21
/ PRIOR APPLICATION NUMBER: 60/299,695
/ PRIOR FILING DATE: 2001-06-20
/ PRIOR APPLICATION NUMBER: 60/315,614
/ PRIOR FILING DATE: 2001-08-29
/ PRIOR APPLICATION NUMBER: 60/272,405
/ PRIOR FILING DATE: 2001-02-28
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 653
/ SOFTWARE: PatentIn Ver. 2.1
/ SEQ ID NO 111
/ LENGTH: 15845
/ TYPE: DNA
/ ORGANISM: Homo sapiens
/ US-10-085-198-111

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... 389 TTTCACATCCACATCTCATTGCACTGAAGAAATAACTCTGGTTGGAGAT 347

10008

— — — — —

TU009 CAGCAGGACGTATCAACAAGCATTCAGCACAGCTTGAATTCCACTTTGG

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QY 408 TGTATCTTCGATACAAATCCGTAAGACATCTCTGAATACATCAATCGCTGTTCTT 467
DB 10069 CAGCAGCAGCTTCAACACAGCAGCAGCAGCAGCTTCAACAGCAGCAGCAGCTACAA 10128
QY 468 CGTTACCATCAACAATAACCTGAACATGCTTAAATCTATACATCAACGGTA 517
DB 10129 CAGCAACAGCAACAACAGCAGCAGCTTCAACAGCAGCAGCAGCAAGCA 10178

RESULT 2
US-10-092-411A-1029/c
; Sequence 1029, Application US/10092411A
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
; TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 032796-101
; CURRENT APPLICATION NUMBER: US/10/092,411A
; CURRENT FILING DATE: 2002-03-07
; PRIOR APPLICATION NUMBER: US 09/134,001
; PRIOR FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/064,964
; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: US 60/055,779
; PRIOR FILING DATE: 1997-08-14
; NUMBER OF SEQ ID NOS: 5676
; SEQ ID NO 1029
; LENGTH: 2358
; TYPE: DNA
; ORGANISM: Staphylococcus epidermidis
US-10-092-411A-1029

Query Match 2.4%; Score 32.6; DB 6; Length 2358;
Best Local Similarity 53.5%; Pred. No. 3.5;
Matches 68; Conservative 0; Mismatches 59; Indels 0; Gaps 0;

QY 369 CATCTGACTCTGATGATCAACGCGTAAGACCAAACTGTATTCTTCGAATACACAT 428
DB 703 CACAGAAATCGGTTCAATATATAGTGTTCCTGATGCCGATGTCATGACATAC 644
QY 429 CGGTGAAGACATCTCGAATACATCAATCGGTGTTCTCGTTACCATCAACATACCT 488
DB 643 CATTGAATCTTCTATATATAGCTTTCACCGGAATAACATTCGATCATTTCTTACTG 584
QY 489 GAACAAAT 495
DB 583 TTACAAAT 577

RESULT 3
US-10-092-411A-1175/c
; Sequence 1175, Application US/10092411A
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
; TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 032796-101
; CURRENT APPLICATION NUMBER: US/10/092,411A
; CURRENT FILING DATE: 2002-03-07
; PRIOR APPLICATION NUMBER: US 09/134,001
; PRIOR FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/064,964
; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: US 60/055,779
; PRIOR FILING DATE: 1997-08-14
; NUMBER OF SEQ ID NOS: 5676
; SEQ ID NO 1175
; LENGTH: 1854
; TYPE: DNA
; ORGANISM: Staphylococcus epidermidis
US-10-092-411A-1175
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Query Match 2.4%; Score 32; DB 6; Length 1854;
Best Local Similarity 50.7%; Pred. No. 4.5;
Matches 77; Conservative 0; Mismatches 75; Indels 0; Gaps 0;

QY 183 CGTGTTTACTCAGAAATCAACATCATCTTCAACTCCGTATTCGTGACTTCTCTGTTTC 242
DB 880 CCATGATAAGAAAATTGGAATAAGAAACCATAAACCAAGGAATCTTAATTTTCGACCA 821
QY 243 CTTCTGGATTCTGATCCCGAAATACAAGACGACGGTATCCAGAAATTCATCCACAATGA 302
DB 820 TCTCTCATTAGTTTAAAGTAAAGAACACAGCACCCGGAAGAATGCACCTAATATGT 761
QY 303 ATACACCATCATCAACTGCATGAAGATAACT 334
DB 760 ATTACAGCACCAACACCTTCAGCAAGTGTACT 729

RESULT 4
US-10-092-411A-1515/c
; Sequence 1515, Application US/10092411A
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
; TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 032796-101
; CURRENT APPLICATION NUMBER: US/10/092,411A
; CURRENT FILING DATE: 2002-03-07
; PRIOR APPLICATION NUMBER: US 09/134,001
; PRIOR FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/064,964
; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: US 60/055,779
; PRIOR FILING DATE: 1997-08-14
; NUMBER OF SEQ ID NOS: 5676
; SEQ ID NO 1515
; LENGTH: 2835
; TYPE: DNA
; ORGANISM: Staphylococcus epidermidis
US-10-092-411A-1515

Query Match 2.4%; Score 32; DB 6; Length 2835;
Best Local Similarity 49.4%; Pred. No. 5.3;
Matches 83; Conservative 0; Mismatches 85; Indels 0; Gaps 0;

QY 935 TCGTACGTAAAGAGACTACATCTACCTGGACTTCTTCAACCTGAATCAGGAATGGCGTG 994
DB 1639 TCGGACTCAACAAGTACGTCAACGTGCAAGAAAGTCATCAACGTCAACGAGTGAGAGTGAC 1580
QY 995 TATACACCTACAAGTACTTCAAGAAAGAGAGAAAGCTTTTCTGCTCCGATCTCTG 1054
DB 1579 TCAACAAGTGAAGTACGTCAATTAAGCGGAGTCGACGACCAAGCGTTTCAGATTCAACA 1520
QY 1055 ATTCCGACGAACCTTACACACACCATCCAGATCAAGAATAAGACGAGAAC 1102
DB 1519 AGCGGTGACATCCGACAGTGCATCAACATCAACGAGTGTGAGCGAC 1472

RESULT 5
US-10-092-411A-1685/c
; Sequence 1685, Application US/10092411A
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
; TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 032796-101
; CURRENT APPLICATION NUMBER: US/10/092,411A
; CURRENT FILING DATE: 2002-03-07
; PRIOR APPLICATION NUMBER: US 09/134,001
; PRIOR FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/064,964
; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: US 60/055,779
; PRIOR FILING DATE: 1997-08-14
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; NUMBER OF SEQ ID NOS: 5676
; SEQ ID NO 1685
; LENGTH: 3561
; TYPE: DNA
; ORGANISM: Staphylococcus epidermidis
US-10-092-411A-1685

Query Match      2.4%; Score 32; DB 6; Length 3561;
Best Local Similarity 49.4%; Pred. No. 5.8;
Matches 83; Conservative 0; Mismatches 85; Indels 0; Gaps 0;

QY 935 TCGTAGCTAAAGAACTACATCTACCTGGACTTCTTCAACCTGAATCAGGAATGGCGTG 994
DB 2435 TCGGACTCAACAAGTAGCTCAACGTCAGAAAGTGCATCAACGTCACAGGAGTGAGAGTGAC 2376
QY 995 TATACACCTTACAGTACTTCAGAAAGAGAGAGAAAGCTTTTCTGGCTCCGATCTCTG 1054
DB 2375 TCACCAAGTGAAGTAGCTGATTAAGCGAGTCGACAGCAACGCTTCAGATTCACAA 2316
QY 1055 ATTCCGACGAATCTACACACCATCCAGATCAAGAATACGACGAAC 1102
DB 2315 AGCGGCTGCACATCCGACAGTGCATCAACATCAACGAGTGTGAGCGAC 2268

RESULT 6
US-10-092-411A-1626
; Sequence 1626, Application US/10092411A
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
; FILE REFERENCE: 032796-101
; CURRENT APPLICATION NUMBER: US/10/092,411A
; PRIOR FILING DATE: 2002-03-07
; PRIOR APPLICATION NUMBER: US 09/134,001
; PRIOR FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/064,964
; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: US 60/055,779
; PRIOR FILING DATE: 1997-08-14
; NUMBER OF SEQ ID NOS: 5676
; SEQ ID NO 1626
; LENGTH: 6414
; TYPE: DNA
; ORGANISM: Staphylococcus epidermidis
US-10-092-411A-1626

Query Match      2.4%; Score 32; DB 6; Length 6414;
Best Local Similarity 49.4%; Pred. No. 7.3;
Matches 83; Conservative 0; Mismatches 85; Indels 0; Gaps 0;

QY 935 TCGTAGCTAAAGAACTACATCTACCTGGACTTCTTCAACCTGAATCAGGAATGGCGTG 994
DB 3610 TCGGACTCAACAAGTAGCTCAACGTCAGAAAGTGCATCAACGTCACAGGAGTGAGAGTGAC 3659
QY 995 TATACACCTTACAGTACTTCAAGAAGAGAGAAAGCTTTTCTGGCTCCGATCTCTG 1054
DB 3670 TCACAAGTGAAGTAGCTGATTAAGCGAGTCGACAGCAACGAGGTTTCAGATTCACAA 3729
QY 1055 ATTCCGACGAATCTACACACCATCCAGATCAAGAATACGACGAAC 1102
DB 3730 AGCGGCTGCACATCCGACAGTGCATCAACATCAACGAGTGTGAGCGAC 3777

RESULT 7
US-10-092-411A-818/c
; Sequence 818, Application US/10092411A
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
; FILE REFERENCE: 032796-101
; CURRENT APPLICATION NUMBER: US/10/092,411A
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; CURRENT FILING DATE: 2002-03-07
; PRIOR APPLICATION NUMBER: US 09/134,001
; PRIOR FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/064,964
; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: US 60/055,779
; PRIOR FILING DATE: 1997-08-14
; NUMBER OF SEQ ID NOS: 5676
; SEQ ID NO 818
; LENGTH: 2211
; TYPE: DNA
; ORGANISM: Staphylococcus epidermidis
US-10-092-411A-818

Query Match      2.4%; Score 31.8; DB 6; Length 2211;
Best Local Similarity 47.7%; Pred. No. 5.4;
Matches 93; Conservative 0; Mismatches 102; Indels 0; Gaps 0;

QY 387 TATCAACGGTAGAACCAATCTGTTTCGATATACATCAACATCCGCTGAAGACATCTCTGA 446
DB 1669 TATTGACGATTTGTTATGATGTAACACCAACGCAATCCACAGCTGCGTACAAATCTTCAT 1610
QY 447 ATACATCAATCGCTGTTCTTCGTTTACCATCACCAATAACCTGAACATGCTAAAAATCTA 506
DB 1609 CATTAGCAAAATGATATTTTTCATTACGACTTCTTAATTTTCTCAGTTAGATAATCTT 1550
QY 507 CATCAACGGTAAATCGGAATCTAATACCGACATCAAGACATCCGCTGAAGTTATCGCTAA 566
DB 1549 CAACGGAATCCTTGTCTTTAATCTCCGCTTACCATAAATTTACCTTTTTCATAT 1490
QY 567 CGGTGAATCATCTT 581
DB 1489 TAGAAAAACGATCTT 1475

RESULT 8
US-09-728-552-4/c
; Sequence 4, Application US/09728552
; GENERAL INFORMATION:
; APPLICANT: Choo, Kong-Hong Andy
; APPLICANT: Du Sart, Desiree
; APPLICANT: Cancilla, Michael R.
; TITLE OF INVENTION: A NOVEL NUCLEIC ACID MOLECULE
; FILE REFERENCE: Davies Col
; CURRENT APPLICATION NUMBER: US/09/728,552
; PRIOR FILING DATE: 2000-12-02
; PRIOR APPLICATION NUMBER: 09/078,294
; PRIOR FILING DATE: 1998-05-13
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 80246
; TYPE: DNA
; ORGANISM: Nucleotide sequence of NC-contig
US-09-728-552-4

Query Match      2.4%; Score 31.6; DB 5; Length 80246;
Best Local Similarity 50.0%; Pred. No. 24;
Matches 79; Conservative 0; Mismatches 79; Indels 0; Gaps 0;

QY 1179 CGCTTCTACGAATCTGGTATCGTATTCGAAGATACAAAGACTACTTCTGCATCTCAA 1238
DB 32174 CTGTCTTTTACCCACCTGGTTTGTGATCTCTGTATGACAGCTGTGGGATACTATCCAG 32115
QY 1239 ATGGTACCTGAAGAGAGTTAAACGCAAAACCGTACAACTGAACTGGGTGCAATTGSCA 1298
DB 32114 GGCTTCTAGAGTGAAGGAACTCCACCCCTACTCCCTAAGACAGGGTCCCACTCCCT 32055
QY 1299 GTTCATCCGGAAGACGAGGTTGGACCGAATAGTAAG 1336
DB 32054 GGCCATGGACGATACCACTGTGTGACCTGTGTAGGAAG 32017
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RESULT 9
; Sequence 284, Application US/10092411a
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
; TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 032796-101
; CURRENT APPLICATION NUMBER: US/10/092,411a
; CURRENT FILING DATE: 2002-03-07
; PRIOR APPLICATION NUMBER: US 09/134,001
; PRIOR FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/064,964
; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: US 60/055,779
; PRIOR FILING DATE: 1997-08-14
; NUMBER OF SEQ ID NOS: 5676
; SEQ ID NO 284
; LENGTH: 1236
; TYPE: DNA
; ORGANISM: Staphylococcus epidermidis
US-10-092-411a-284

Query Match      2.3%; Score 31; DB 6; Length 1236;
Best Local Similarity 46.5%; Pred. No. 6.9;
Matches 100; Conservative 0; Mismatches 115; Indels 0; Gaps 0;

QY 261 GAATACAGACGACGCGTATCCAGATTACATCCACAATGATACACCATCATCACTG 320
DB 442 GACCAACGTCACAGACTTAACACCTTTAATCTTTCAGTAACTTCAGCTTCATCACTT 383
QY 321 CATGAAGATAACTCTGTTGGAAGATCTCATCCGCGGTAACCGTATCATCTGGACTCT 380
DB 382 CATCGTTATCTAGTTTCTTGTAAATATTCATAAGATTTTTCAGTTTCAAGTTGCTTT 323
QY 381 GATCGATATCAACGTAAGACCAATCTGTTCTTCGAATACACATCCGTAAGACAT 440
DB 322 TTGATATAATGATGCCCAAGTATCAATTTCTTGTGCAACTCGATTTTAGTGACATG 263
QY 441 CTCTGAATACATCAATCGCTGGTTCTTCGTTACCA 475
DB 262 CTCGACTTCATCAGCGACTTTTACAACCTTCACTA 228

RESULT 10
PCT-US02-05068-179
; Sequence 179, Application PC/TUS0205068
; GENERAL INFORMATION:
; APPLICANT: Diversa Corporation
; TITLE OF INVENTION: ENZYMES HAVING ALPHA AMYLASE ACTIVITY
; TITLE OF INVENTION: AND METHODS OF USE THEREOF
; FILE REFERENCE: 09010-108W01
; CURRENT APPLICATION NUMBER: PCT/US02/05068
; CURRENT FILING DATE: 2002-02-21
; PRIOR APPLICATION NUMBER: US 60/270,495
; PRIOR FILING DATE: 2001-02-21
; PRIOR APPLICATION NUMBER: US 60/270,496
; PRIOR FILING DATE: 2001-02-21
; PRIOR APPLICATION NUMBER: US 60/291,122
; PRIOR FILING DATE: 2001-05-14
; NUMBER OF SEQ ID NOS: 321
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 179
; LENGTH: 1524
; TYPE: DNA
; ORGANISM: Environmental
PCT-US02-05068-179

Query Match      2.3%; Score 30.8; DB 1; Length 1524;
Best Local Similarity 46.3%; Pred. No. 8.4;
Matches 101; Conservative 0; Mismatches 117; Indels 0; Gaps 0;

QY 554 GTCTCAGTCCAAATCGAAGACGCGTACAGATCCAGTCTTACTCCGATACCTGAAGA 713
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DB 1074 GTTAGATCGACAGTGGATGGTTCAGCTCTTGTAGGCATTCATCTTGTGG 1133
QY 714 CTCTGGGGTAATCCGCTGATGATACAAAGAATACTATATGTTCAATGCTGGTAACA 773
DB 1134 TGAAGAAGGTATTCATCCATCGGTGTTCTACGCAGATTACTACGGCGCAGTACAGCGACA 1193
QY 774 GAATCTTTATCATCAACTGAAGAAGACTCTCCGGTTGGTGAATCTCTGACTCGTTCCAA 833
DB 1194 AGTTTACACATTAATATGCGCAAGTGCCTTACATTAAGAACTTGTAAACACTCGGTAA 1253
QY 834 ATACAAACGAGAATCTTAAATACATCAACTACCGCGACC 871
DB 1254 AGAGTATCGGTATGCGCAACAGAAATCTTATCTCGACC 1291

RESULT 11
US-10-240-454-14/c
; Sequence 14, Application US/10240454
; GENERAL INFORMATION:
; APPLICANT: OLEK, Alexander
; APPLICANT: PIEPENBROCK, Christian
; APPLICANT: BERLIN, Kurt
; TITLE OF INVENTION: Diagnosis of Diseases Associated with Metabolism
; FILE REFERENCE: S013.11010
; CURRENT APPLICATION NUMBER: US/10/240,454
; CURRENT FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: PCT/EP01/04016
; PRIOR FILING DATE: 2001-04-06
; PRIOR APPLICATION NUMBER: DE 10019058.8
; PRIOR FILING DATE: 2000-04-06
; PRIOR APPLICATION NUMBER: DE 10019173.8
; PRIOR FILING DATE: 2000-04-07
; PRIOR APPLICATION NUMBER: DE 10032529.7
; PRIOR FILING DATE: 2000-06-30
; PRIOR APPLICATION NUMBER: DE 10043826.1
; PRIOR FILING DATE: 2000-09-01
; NUMBER OF SEQ ID NOS: 68
; SEQ ID NO 14
; LENGTH: 8451
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)
US-10-240-454-14

Query Match      2.3%; Score 30.8; DB 6; Length 8451;
Best Local Similarity 50.0%; Pred. No. 16;
Matches 77; Conservative 0; Mismatches 77; Indels 0; Gaps 0;

QY 389 TCAACGGTAAGACCAAAATCTGTATTCTCGAATACAAATCCGTAAGACATCTCTGAAT 448
DB 731 TCTCCCTTAAAAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAA 672
QY 449 ACATCAATCGCTGGTCTTCGTACCATCACAATACCTGAACAATGCTAAATCTACA 508
DB 671 ACATAAACTATCGAACCGCGTAACCTACACCTATAATCCCAACACTTTAAAAAACGAA 612
QY 509 TCAACGGTAACTGGAATCTAATACCGACATCAA 542
DB 611 ACAGCAATATCAGNAATCAAAATTAACCA 578

RESULT 12
US-10-092-411a-2439/c
; Sequence 2439, Application US/10092411a
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCC
; TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 032796-101
; CURRENT APPLICATION NUMBER: US/10/092,411a
; CURRENT FILING DATE: 2002-03-07
```

APPLICANT: PIEPENBROCK, Christian
APPLICANT: BERLIN, Kurt
TITLE OF INVENTION: Diagnosis of Diseases Associated with Metabolism
FILE REFERENCE: 5013.1010
CURRENT APPLICATION NUMBER: US/10/240.454
PRIOR FILING DATE: 2002-10-02
PRIOR APPLICATION NUMBER: PCT/EP01/04016
PRIOR FILING DATE: 2001-04-06
PRIOR APPLICATION NUMBER: DE 10019058.8
PRIOR FILING DATE: 2000-04-06
PRIOR APPLICATION NUMBER: DE 10019173.8
PRIOR FILING DATE: 2000-04-07
PRIOR APPLICATION NUMBER: DE 10032529.7
PRIOR FILING DATE: 2000-06-30
PRIOR APPLICATION NUMBER: DE 10043826.1
PRIOR FILING DATE: 2000-09-01
NUMBER OF SEQ ID NOS: 68
SEQ ID NO 20
LENGTH: 6219
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)
US-10-240-454-20

Query Match 2.3%; Score 30.6; DB 6; Length 3558;
Best Local Similarity 46.5%; Pred. No. 13;
Matches 99; Conservative 0; Mismatches 114; Indels 0; Gaps 0;

QY 300 TGAATACCATCATCACTGCTGATGAGTAAGTAAGTCTGTTGGAAGATCTCCATCCGCGG 359
DB 1123 TAACTTCAGAAATCAGGTAAATGCAATACCAATGACAGTAGTCGTAGCACTTCTTCATCGT 1064
QY 360 TAACCGTATCACTGGACTCTGATCGATATCAACGGTAAGACCAAAATCTGTATTTCTGGA 419
DB 1063 TAGGCATACACTTAAAGATGATTTCTACAGGTCGTCAATTACACTACACTTCA 1004
QY 420 ATACACATCCGTGAGACACTCTCTGAATACATCAATCCGTCGTTCTGTTACCATCAC 479
DB 1003 GTTCAATATCTCGTATAGCGTTTGTCTTAATACGTCCTCATGATTTCGTCAGTTTAC 944
QY 480 CAATTAACCTGAACAATGCTAAATCTACATCAA 512
DB 943 GACGATACACTGTTCCTTCGTCAACACAA 911

RESULT 13
US-10-268-838-1/c
Sequence 1, Application US/10268838
GENERAL INFORMATION:
APPLICANT: KOREA KUMHO PETROCHEMICAL CO., LTD
TITLE OF INVENTION: TRANSGENIC ZOISAGRASS WITH REDUCED SHADE AVOIDANCE
FILE REFERENCE: 1942/52
CURRENT APPLICATION NUMBER: US/10/268.838
CURRENT FILING DATE: 2002-10-11
NUMBER OF SEQ ID NOS: 2
SOFTWARE: PatentIn version 3.1
SEQ ID NO 1
LENGTH: 3390
TYPE: DNA
ORGANISM: Avena sp.
US-10-268-838-1

Query Match 2.3%; Score 30.2; DB 6; Length 3390;
Best Local Similarity 52.8%; Pred. No. 16;
Matches 65; Conservative 0; Mismatches 58; Indels 0; Gaps 0;

QY 294 CCACAATGAATACACATCATCACTGATGAGTAAGTAAGTCTGTTGGAAGATCTCCAT 353
DB 2194 CAACAAGCACACTCCACAAATGATCATGATGAAGTCCGCTGCGACCAAGCATCACAA 2135
QY 354 CCGGGTAACGTTATCTGGAATCTGATCGATATCAACGGTAAGCAAAATCTGTATT 413
DB 2134 CCAAGATAACTGGACCATCATCTCTCTCGGGCCATGATGCTTACCTCAATCGAATT 2075
QY 414 CTT 416
DB 2074 CCT 2072

RESULT 14
US-10-240-454-20/c
Sequence 20, Application US/10240454
GENERAL INFORMATION:
APPLICANT: OLEK, Alexander

APPLICANT: PIEPENBROCK, Christian
APPLICANT: BERLIN, Kurt
TITLE OF INVENTION: Diagnosis of Diseases Associated with Metabolism
FILE REFERENCE: 5013.1010
CURRENT APPLICATION NUMBER: US/10/240.454
PRIOR FILING DATE: 2002-10-02
PRIOR APPLICATION NUMBER: PCT/EP01/04016
PRIOR FILING DATE: 2001-04-06
PRIOR APPLICATION NUMBER: DE 10019058.8
PRIOR FILING DATE: 2000-04-06
PRIOR APPLICATION NUMBER: DE 10019173.8
PRIOR FILING DATE: 2000-04-07
PRIOR APPLICATION NUMBER: DE 10032529.7
PRIOR FILING DATE: 2000-06-30
PRIOR APPLICATION NUMBER: DE 10043826.1
PRIOR FILING DATE: 2000-09-01
NUMBER OF SEQ ID NOS: 68
SEQ ID NO 20
LENGTH: 6219
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)
US-10-240-454-20

Query Match 2.2%; Score 30; DB 6; Length 6219;
Best Local Similarity 47.4%; Pred. No. 23;
Matches 90; Conservative 0; Mismatches 100; Indels 0; Gaps 0;

QY 146 ACCAGTTCAAACCTGACCTCTTCGCTAATCTAAGATCCGTTTACTCAGATCAAGACA 205
DB 3709 ACACTTTAAATCTCTCTTTACTCATATAAAAACTCTTACATAATAATAAAAACT 3650
QY 206 TCATCTTCAACTCCGTTATTCCTGGAGCTTCTCTGTTCCCTTCGTTGATCCCGAAT 265
DB 3649 AAATATTACACTTATTTTCTCTCTAATTTTACTACTATATAAAAACTTATTTTAAATA 3590
QY 266 ACAAGACGACGGTATCCAGATTACATCCAAATGATGATACCATCATCAACTCATGA 325
DB 3589 ACAATACTACTATTTCTCTAACAATCACTACCATTAATATATTAATAAAAACTTCTCAAAA 3530
QY 326 AGATAAATCT 335
DB 3529 AAAAAACAC 3520

RESULT 15
PCT-US02-12342-2
Sequence 2, Application PC/TUS0212342
GENERAL INFORMATION:
APPLICANT: Chu, Peter
APPLICANT: Jiang, Yingping
APPLICANT: Li, Congfen
APPLICANT: Liao, X. Charlene
APPLICANT: Masuda, Esteban
APPLICANT: Pardo, Jorge
APPLICANT: Spencer, Colin
APPLICANT: Zhao, Haoran
APPLICANT: Rigel Pharmaceuticals, Inc.
TITLE OF INVENTION: EDG: Modulators of Lymphocyte Activation and Migration
FILE REFERENCE: 021044-000310PC
CURRENT APPLICATION NUMBER: PCT/US02/12342
CURRENT FILING DATE: 2002-08-26
PRIOR APPLICATION NUMBER: US 60/284,763
PRIOR FILING DATE: 2001-04-18
PRIOR APPLICATION NUMBER: US 09/971,228
PRIOR FILING DATE: 2001-10-03
NUMBER OF SEQ ID NOS: 16
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 2
LENGTH: 1032
TYPE: DNA
ORGANISM: Homo sapiens

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OM protein - protein search, using sw model

Run on: November 1, 2002, 07:18:23 ; Search time 26 seconds
(without alignments)
497.926 Million cell updates/sec

Title: US-09-910-186a-8
Perfect score: 2350
Sequence: 1 MANKYSEILNLIILNRYK.....YNKLGNQWQIPKDEGWTE 440

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 262574 seqs, 29422922 residues

Total number of hits satisfying chosen parameters: 262574

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents AA:*
1: /cgn2_6/ptodata/1/iaa/5A.COMB.pap.*
2: /cgn2_6/ptodata/1/iaa/5B.COMB.pap.*
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5: /cgn2_6/ptodata/1/iaa/PCRUS.COMB.pap.*
6: /cgn2_6/ptodata/1/iaa/backfiles1.pap.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	ID	Description
1	1667	70.9	1169	4	US-09-255-829-20
2	831.5	35.4	438	1	US-08-480-604A-23
3	831.5	35.4	438	2	US-08-405-496A-23
4	831.5	35.4	438	4	US-08-915-136-23
5	831.5	35.4	462	1	US-08-480-604A-26
6	831.5	35.4	462	2	US-08-405-496A-26
7	831.5	35.4	462	4	US-08-915-136-26
8	831.5	35.4	1296	1	US-08-480-604A-28
9	831.5	35.4	1296	2	US-08-405-496A-28
10	831.5	35.4	1296	4	US-08-915-136-28
11	595	25.3	452	1	US-07-618-312A-2
12	595	25.3	452	1	US-08-280-228-2
13	594	25.3	452	1	US-07-618-312A-4
14	594	25.3	452	1	US-08-280-228-4
15	594	25.3	618	1	US-08-668-381A-5
16	594	25.3	853	4	US-08-913-880C-17
17	594	25.3	858	4	US-08-913-880C-16
18	594	25.3	860	4	US-08-913-880C-15
19	594	25.3	862	4	US-08-913-880C-14
20	594	25.3	865	4	US-08-913-880C-13
21	594	25.3	866	4	US-08-913-880C-12
22	594	25.3	874	4	US-08-913-880C-11
23	594	25.3	875	4	US-08-913-880C-10
24	594	25.3	1315	4	US-08-913-880C-1
25	575	24.5	452	1	US-08-110-786A-8
26	169.5	7.2	140	4	US-08-446-114A-22
27	163	6.9	2391	2	US-08-446-855A-2

28	163	6.9	2391	4	US-09-150-741-2	Sequence 2, Appl
29	137.5	5.9	476	4	US-09-316-083-3	Sequence 3, Appl
30	126	5.4	1435	2	US-08-568-459A-4	Sequence 4, Appl
31	126	5.4	1435	2	US-08-487-826B-4	Sequence 4, Appl
32	126	5.4	1435	4	US-09-210-288-4	Sequence 4, Appl
33	124.5	5.3	493	4	US-08-686-968C-4	Sequence 4, Appl
34	124	5.3	878	4	US-09-134-001C-4378	Sequence 4378, Ap
35	123.5	5.3	2366	1	US-08-480-604A-10	Sequence 10, Appl
36	123.5	5.3	2366	4	US-08-405-496A-10	Sequence 10, Appl
37	123.5	5.3	2366	4	US-08-915-136-10	Sequence 10, Appl
38	123.5	5.3	2366	4	US-08-957-310-10	Sequence 10, Appl
39	123.5	5.3	3135	1	US-08-323-170B-2	Sequence 2, Appl
40	123.5	5.3	3135	4	US-08-954-441-2	Sequence 2, Appl
41	120	5.1	2710	1	US-08-480-604A-6	Sequence 6, Appl
42	120	5.1	2710	2	US-08-405-496A-6	Sequence 6, Appl
43	120	5.1	2710	4	US-08-915-136-6	Sequence 6, Appl
44	120	5.1	2710	4	US-08-957-310-6	Sequence 6, Appl
45	118.5	5.0	990	2	US-08-392-625-20	Sequence 20, Appl

ALIGNMENTS

RESULT 1
US-09-255-829-20
; Sequence 20, Application US/09255829
; Patent No. 6461617
; GENERAL INFORMATION:
; APPLICANT: Shone, Clifford Charles
; APPLICANT: Quinn, Conrad Padraig
; APPLICANT: Foster, Keith Alan
; TITLE OF INVENTION: Recombinant Toxin Fragments
; NUMBER OF SEQUENCES: 29
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: STERNE, KESSLER, GOLDSTEIN, & FOX P.L.L.C.
; STREET: 1100 NEW YORK AVENUE, NW, SUITE 600
; CITY: WASHINGTON
; STATE: DC
; COUNTRY: USA
; ZIP: 20005-3934
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30 (EPO)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/255,829
; FILING DATE: 23-FEB-1999
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/GB97/02273
; FILING DATE: 22-AUG-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/782,893
; FILING DATE: 27-DEC-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: ESMOND, ROBERT W.
; REGISTRATION NUMBER: 32,893
; REFERENCE/DOCKET NUMBER: 1581.0130002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202-371-2600
; TELEFAX: 202-371-2540
; INFORMATION FOR SEQ ID NO: 20:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1169 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-255-829-20

Query Match 70.9%; Score 1667; DB 4; Length 1169;
Best Local Similarity 99.7%; Pred. No. 1.7e-121;
Matches 317; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 MANYKSEILNIIILRLRYKDNLDLSGYGAKVEYDGVDELNDKNOFKUTSSANSKIRV 60
Db 852 MFNKYSEILNIIILRLRYKDNLDLSGYGAKVEYDGVDELNDKNOFKUTSSANSKIRV 911
QY 61 TQNONIIFNSVDFSVFWRIPKYNKDGIONTHNEYTTIINCKMKNNGWKISIRGNRI 120
Db 912 TQNONIIFNSVDFSVFWRIPKYNKDGIONTHNEYTTIINCKMKNNGWKISIRGNRI 971
QY 121 IWLIDINGKTSVFEYNIRDISYINRWFFVTITNNLNNAKIYINGKLESNTDIKI 180
Db 972 IWLIDINGKTSVFEYNIRDISYINRWFFVTITNNLNNAKIYINGKLESNTDIKI 1031
QY 181 REVIANGEIIFKLDGIDRTQFIWKKYSIFNTLSQSNIEERYKIOSYSEYKLDGFWGNP 240
Db 1032 REVIANGEIIFKLDGIDRTQFIWKKYSIFNTLSQSNIEERYKIOSYSEYKLDGFWGNP 1091
QY 241 LMYNKEYYMFNAGNKNYSIKLKADSPVGEILTRSKYNQNSKIYINRDLYIGERFIIRKS 300
Db 1092 LMYNKEYYMFNAGNKNYSIKLKADSPVGEILTRSKYNQNSKIYINRDLYIGERFIIRKS 1151
QY 301 NSQSIINDIVRKEDIYIL 318
Db 1152 NSQSIINDIVRKEDIYIL 1169
RESULT 2
US-08-480-604A-23
; Sequence 23, Application US/08480604A
; Patent No. 5736139
; GENERAL INFORMATION:
; APPLICANT: KINK, JOHN A.
; APPLICANT: THALLEY, BRUCE S.
; APPLICANT: PADHYE, NISHA V.
; APPLICANT: FINCA, JOSEPH R.
; APPLICANT: STAFFORD, DOUGLAS C.
; TITLE OF INVENTION: VACCINE AND ANTITOXIN FOR TREATMENT AND
; PREVENTION OF C. DIFFICILE DISEASE
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL, LLP
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION NUMBER: US/08/480,604A
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; FILING DATE: 14-APR-1995
; APPLICATION NUMBER: US 08/422,711
; PRIOR APPLICATION DATA:
; FILING DATE: 16-MAR-1995
; APPLICATION NUMBER: US 08/405,496
; PRIOR APPLICATION DATA:
; FILING DATE: 25-OCT-1994
; APPLICATION NUMBER: US 08/329,154
; PRIOR APPLICATION DATA:
; FILING DATE: 02-DEC-1993
; APPLICATION NUMBER: US 07/985,321
; PRIOR APPLICATION DATA:
; FILING DATE: 04-DEC-1992
; APPLICATION NUMBER: US 07/429,791
; PRIOR APPLICATION DATA:
; FILING DATE: 31-OCT-1989
; ATTORNEY/AGENT INFORMATION:

NAME: INGOLIA, DIANE E.
REGISTRATION NUMBER: 40,027
REFERENCE/DOCKET NUMBER: OPHD-01763
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 23:
SEQUENCE CHARACTERISTICS:
LENGTH: 438 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-480-604A-23
Query Match 35.4%; Score 831.5; DB 1; Length 438;
Best Local Similarity 40.0%; Pred. No. 4.7e-57;
Matches 180; Conservative 83; Mismatches 150; Indels 37; Gaps 10;
QY 4 KYNSEILNIIILRLRYKDNLDLSGYGAKVEYDGVDELNDKNOFKUTSSANSKIRV 61
Db 10 EYKNIINTSILNRYESNHLIDLSRYASKINIGSKVNFDPIDKNQIOLFNLLESSKIEVI 69
QY 62 QNQNIIENSVELDFSVFWRIPKYNKDGIONTHNEYTTIINCKMKNNGWKISIRGNRI 121
Db 70 LKNAIVNSMYENFSTFSWIRIPKYNF---SISLANEYITINCMENNSGKVSINYEII 126
QY 122 WTLIDINGKTSVFEYNIRDISYINRWFFVTITNNLNNAKIYINGKLESNTDIKI 180
Db 127 WTLIDINGKTSVFEYNIRDISYINRWFFVTITNNLNNAKIYINGKLESNTDIKI 186
QY 181 REVIANGEIIFKLDGIDRTQFIWKKYSIFNTLSQSNIEERYKIOSYSEYKLDGFWGNP 240
Db 187 GNHASNNIMFKLDGIDRTQFIWKKYSIFNTLSQSNIEERYKIOSYSEYKLDGFWGNP 246
QY 241 LMYNKEYYMFNAGNKNYSIKLKADSPVGEILTRSKYNQNSKIYINRDLYIGERFIIRKS 300
Db 247 LQYDKPYMLNLDYKPNKYDNNVNGVIRGYMLKGPGRSVMTNIIYLNSS-----LYRG 299
QY 292 EKFTIRKSNQSINDIVRKEDIYILDFNLOEWRVYTYKFKKEEKLFLAPISDS 351
Db 300 TKFIKKYASGN--KNIVNNDRVYINVVVKNKYRLATNASQAGVEKILSALEIPDVG 357
QY 352 ELYNTIOIKYDEQP--TYSQCLLFKDEESTDEIGLIHFRFYSYGIVFEYKDYFCISK 410
Db 358 NLSQVYVYKSKNDQGITNCKM--NLQDNNGNDIGFIGHOFNNIA-----KLVASN 407
QY 411 WYKVEKRPYNLKLGNQWQFIPKDEGTE 440
Db 408 WYNQIERS--SRTLCSEWEIFPVDGWE 435
RESULT 3
US-08-405-496A-23
; Sequence 23, Application US/08405496A
; Patent No. 5919665
; GENERAL INFORMATION:
; APPLICANT: WILLIAMS, JAMES A.
; TITLE OF INVENTION: VACCINE FOR CLOSTRIDIUM BOTULINUM
; TITLE OF INVENTION: NEUROTOXIN
; NUMBER OF SEQUENCES: 30
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL, LLP
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: USA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:

APPLICATION NUMBER: US 08/405,496A
 FILING DATE: 16-MAR-1995
 CLASSIFICATION: 424
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/329,154
 FILING DATE: 25-OCT-1994
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/161,907
 FILING DATE: 02-DEC-1993
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/985,321
 FILING DATE: 04-DEC-1992
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/429,791
 FILING DATE: 31-OCT-1989
 ATTORNEY/AGENT INFORMATION:
 NAME: INGOLIA, DIANE E.
 REGISTRATION NUMBER: 40,027
 REFERENCE/DOCKET NUMBER: OPHD-01308
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 705-8410
 TELEFAX: (415) 397-8338
 INFORMATION FOR SEQ ID NO: 23:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 438 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-08-405-496A-23

Query Match 35.4%; Score 831.5; DB 2; Length 438;
 Best Local Similarity 40.0%; Pred. No. 4.7e-57;
 Matches 180; Conservative 83; Mismatches 150; Indels 37; Gaps 10;

QY 4 KYNEILLNIIILRYKDNLDLSCGAKVEYDGVN--DKNQFKLTSSANSKIRVT 61
 DB 10 EYKNIINTSLNRYESNHLIDLSRYASKINSGKYNFDPIDKNOIQFLNLESSKIEVI 69
 QY 62 QNQNIIIFNSFLDVSFVIRIPKYNQDGIQNYIHNEYTIINCMKNNSGKISIRGNRII 121
 DB 70 LKNAIVNSMYENFSTFWIRIPKYN--SISLNNEYTIINCMNNSGKISIRGNRII 126
 QY 122 WTLIDINGKTSVFEYNIREDISEYINRFFVTITNN--LNNAKIYINGKLESNTDIKI 180
 DB 127 WTLQDTQBIKQVVFYKISQMINISDIYINRFFVTITNN--LNNAKIYINGKLESNTDIKI 186
 QY 181 REVANGIIIFKLDGIDRTQFIWMKYFSIFNTSLSQSNIEERYKIQSYEYLKDFWGNP 240
 DB 187 GNHASNINIFKLGDCRTHRYIWKYFNFLDKELNEKEIKDLYDNQNSGILKDFWGDY 246
 QY 241 LMNYKEYTFNAGKNYSYIKLK-----DSPVGEILTRSKYQNSKYINRDLIYG 291
 DB 247 LQYDKPYTMLNLYDPNKYVDVNNVIRGYMYLKGPRGSVMITNLYLNS-----LYRG 299
 QY 292 EKFIIRKNSQSNDIDTREDYIYDFDNLQEMRVYTYKYFKKEEKLFLAPISDS 351
 DB 300 TKFIKKYASGN--KDLVRNDRVYINVVVKNKEYELATNASQAGVEKLTSALEIPDVG 357
 QY 352 ELYNPIQIKEYDEOP--TVSCQLLPKDEESTDEIGLIGIRHYFESGIVPEYKYDFCISK 410
 DB 358 NLSQVVMVKNKNDQGITNKCKM--NLQDNNGNDIGTIGFHQFNIA-----KLVASN 407
 QY 411 WYLVKVKRPKNLKGQCNWQFIPKDEGWE 440
 DB 408 WYNQIERS--SRLLGCSWEFIPVDDGWE 435

RESULT 4
 US-08-915-136-23
 ; Sequence 23, Application US/08915136
 ; Patent No. 6290360
 ; GENERAL INFORMATION:
 ; APPLICANT: KINK, JOHN A.

APPLICANT: THALLEY, BRUCE S.
 APPLICANT: PADHYE, NISHA V.
 APPLICANT: FIRCA, JOSEPH R.
 APPLICANT: STAFFORD, DOUGLAS C.
 TITLE OF INVENTION: VACCINE AND ANTITOXIN FOR TREATMENT AND
 PREVENTION OF C. DIFFICILE DISEASE
 NUMBER OF SEQUENCES: 32
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: MEDLEN & CARROLL, LLP
 STREET: 220 MONTGOMERY STREET, SUITE 2200
 CITY: SAN FRANCISCO
 STATE: CALIFORNIA
 COUNTRY: UNITED STATES OF AMERICA
 ZIP: 94104
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US 08/915,136
 FILING DATE:
 CLASSIFICATION:
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: 08/480,604
 FILING DATE:
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/405,496
 FILING DATE: 16-MAR-1995
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/329,154
 FILING DATE: 25-OCT-1994
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/161,907
 FILING DATE: 02-DEC-1993
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/985,321
 FILING DATE: 04-DEC-1992
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/429,791
 FILING DATE: 31-OCT-1989
 ATTORNEY/AGENT INFORMATION:
 NAME: INGOLIA, DIANE E.
 REGISTRATION NUMBER: 40,027
 REFERENCE/DOCKET NUMBER: OPHD-01763
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 705-8410
 TELEFAX: (415) 397-8338
 INFORMATION FOR SEQ ID NO: 23:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 438 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-08-915-136-23

Query Match 35.4%; Score 831.5; DB 4; Length 438;
 Best Local Similarity 40.0%; Pred. No. 4.7e-57;
 Matches 180; Conservative 83; Mismatches 150; Indels 37; Gaps 10;

QY 4 KYNEILLNIIILRYKDNLDLSCGAKVEYDGVN--DKNQFKLTSSANSKIRVT 61
 DB 10 EYKNIINTSLNRYESNHLIDLSRYASKINSGKYNFDPIDKNOIQFLNLESSKIEVI 69
 QY 62 QNQNIIIFNSFLDVSFVIRIPKYNQDGIQNYIHNEYTIINCMKNNSGKISIRGNRII 121
 DB 70 LKNAIVNSMYENFSTFWIRIPKYN--SISLNNEYTIINCMNNSGKISIRGNRII 126
 QY 122 WTLIDINGKTSVFEYNIREDISEYINRFFVTITNN--LNNAKIYINGKLESNTDIKI 180
 DB 127 WTLQDTQBIKQVVFYKISQMINISDIYINRFFVTITNN--LNNAKIYINGKLESNTDIKI 186
 QY 181 REVANGIIIFKLDGIDRTQFIWMKYFSIFNTSLSQSNIEERYKIQSYEYLKDFWGNP 240

Db 187 GNHASNNMFKLDGGRDTHRYIWKIFNLFDKELNEKEIKDLYNQNSGILKDFWGDY 245
QY 241 LMYNKEYYFNAGNKNYSIKLKK-----DSPVGEILTRSKYNQNSKYINRYDIYIG 291
Db 247 LOYDKPYMLNDYDNKYVDVNVNGVGYWYKLGPRGSMVTNINLSS-----LYRG 299
QY 292 EKFIIRKNSQINDIVRKEDYIYLDFFNLNOEWRVYTYKFKKEEKLFLAPISDS 351
Db 300 TKFIIRKYSAGN--KDNIVNDRVYINVVNKNKRYLATNASQAGVEKILSALEIPDV 357
QY 352 ELVNTIQIKEYDEQP--TYSQCLLFKKDEESTDEIGLIGHREFYESGIVFEYKYDFCISK 410
Db 356 NLSQVVMKSKNDQGITNCKM--NLQDNGNDIGFIPHQFNIA-----KLVASN 407
QY 411 WYKEVRKPYNKLKGNWQFIPKDEGWE 440
Db 408 WYNQIERS--SRTLGCSWEFIPVDDGWE 435

RESULT 5
US-08-480-604A-26
; Sequence 26, Application US/08480604A
; Patent No. 5736139
; GENERAL INFORMATION:
; APPLICANT: KINK, JOHN A.
; APPLICANT: THALLEY, BRUCE S.
; APPLICANT: PADHYE, NISHA V.
; APPLICANT: FIRCA, JOSEPH R.
; APPLICANT: STAFFORD, DOUGLAS C.
; TITLE OF INVENTION: VACCINE AND ANTITOXIN FOR TREATMENT AND
; TITLE OF INVENTION: PREVENTION OF C. DIFFICILE DISEASE
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL, LLP
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/480,604A
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/422,711
; FILING DATE: 14-APR-1995
; PRIOR APPLICATION DATA: US 08/405,496
; APPLICATION NUMBER: US 08/405,496
; FILING DATE: 16-MAR-1995
; PRIOR APPLICATION DATA: US 08/329,154
; APPLICATION NUMBER: US 08/329,154
; FILING DATE: 25-OCT-1994
; PRIOR APPLICATION DATA: US 08/161,907
; APPLICATION NUMBER: US 08/161,907
; FILING DATE: 02-DEC-1993
; PRIOR APPLICATION DATA: US 07/985,321
; APPLICATION NUMBER: US 07/985,321
; FILING DATE: 04-DEC-1992
; PRIOR APPLICATION DATA: US 07/429,791
; APPLICATION NUMBER: US 07/429,791
; FILING DATE: 31-OCT-1989
; ATTORNEY/AGENT INFORMATION:
; NAME: INGOLIA, DIANE E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: OPND-01763
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 26:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 462 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-480-604A-26
Query Match 35.4%; Score 831.5; DB 1; Length 462;
Best Local Similarity 40.0%; Pred No. 5e-57;
Matches 180; Conservative 83; Mismatches 150; Indels 37; Gaps 10;
QY 4 KYNSEILNIIILRYKDNLLDLGSGYGAKEVYDGVELN--DKNQFKLTSSANSKIRVT 61
Db 34 EYIKNIINTSILNRYESNHLIDLSRYASKINIGSKVNFDPIDKNQIQLFNLESKIEVI 93
QY 62 QNQNIIIFNSVFLDFSVFWIRIPKYKNDGIQNYIHNEYTIINCMMKNSGKISIRGNRII 121
Db 94 LKNAIVYNSMIENFSTFSWIRIPKYN---SISLNNEYTIINCMMNSGKVSLSNYGEII 150
QY 122 WTLIDINGTKSVFFEYINIREDISYINRWFFVTITNN--LNNAKIYIINGKLESNFDIKDI 180
Db 151 WTLQDTQEIQRVVRVYSQMINISDYINRWIEFTITNNLNNSKIYINGRLIDQKPISNL 210
QY 181 REVIANGEILFKLDGIDRTOFTWKKYFSIENTELSONIEREYKIQSYEVLKDFWGNP 240
Db 211 GNHASNNMFKLDGGRDTHRYIWKIFNLFDKELNEKEIKDLYNQNSGILKDFWGDY 270
QY 241 LMYNKEYYFNAGNKNYSIKLKK-----DSPVGEILTRSKYNQNSKYINRYDIYIG 291
Db 271 LOYDKPYMLNDYDNKYVDVNVNGVGYWYKLGPRGSMVTNINLSS-----LYRG 323
QY 292 EKFIIRKNSQINDIVRKEDYIYLDFFNLNOEWRVYTYKFKKEEKLFLAPISDS 351
Db 324 TKFIIRKYSAGN--KDNIVNDRVYINVVNKNKRYLATNASQAGVEKILSALEIPDV 381
QY 352 ELVNTIQIKEYDEQP--TYSQCLLFKKDEESTDEIGLIGHREFYESGIVFEYKYDFCISK 410
Db 382 NLSQVVMKSKNDQGITNCKM--NLQDNGNDIGFIPHQFNIA-----KLVASN 431
QY 411 WYKEVRKPYNKLKGNWQFIPKDEGWE 440
Db 432 WYNQIERS--SRTLGCSWEFIPVDDGWE 459

RESULT 6
US-08-405-496A-26
; Sequence 26, Application US/08405496A
; Patent No. 5919665
; GENERAL INFORMATION:
; APPLICANT: WILLIAMS, JAMES A.
; TITLE OF INVENTION: VACCINE FOR CLOSTRIDIUM BOTULINUM
; TITLE OF INVENTION: NEUROTOXIN
; NUMBER OF SEQUENCES: 30
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL, LLP
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: USA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/405,496A
; FILING DATE: 16-MAR-1995
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/329,154

/ FILING DATE: 25-OCT-1994
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/161,907
/ FILING DATE: 02-DEC-1993
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 07/985,321
/ FILING DATE: 04-DEC-1992
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 07/429,791
/ FILING DATE: 31-OCT-1989
/ ATTORNEY/AGENT INFORMATION:
/ NAME: INGOLIA, DIANE E.
/ REGISTRATION NUMBER: 40,027
/ REFERENCE/DOCKET NUMBER: OPD-01308
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (415) 705-8410
/ TELEFAX: (415) 397-8338
/ INFORMATION FOR SEQ ID NO: 26:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 462 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
/ US-08-405-496A-26

Query Match 35.4%; Score 831.5; DB 2; Length 462;
Best Local Similarity 40.0%; Pred. No. 5e-57;
Matches 180; Conservative 83; Mismatches 150; Indels 37; Gaps 10;

Qy 4 KYNSEILNLIILRYKNDNLIDLSYGAKVEYDGVLELN--DKNQFKLTSSANSKIRVT 61
Db 34 EYKNIINTSILNRVESNLIDLSRYASKINIGSKVNFDPDKNQIQLFNLESSKIEVI 93
Qy 62 QNQNIIFNSVFLDPSVFWIRIPKYKNDGQNTQYIHNEYTIINCMMNNSGWKISIRGNRII 121
Db 94 LKNAIVNMYENFSTFWIRIPKYN---SISLNNEYTIINCMMNNSGWKISIRGNRII 150
Qy 122 WTLTDINGKTYSFFEYNIREDISEYNIRFFVTIINN--LNNAKIYINGKLESNTDIKDI 180
Db 151 WTLQDTEIQRVVFKYSQMINISDIYNRIFWTIINNRLNNSKIYINGRLDQKPSNL 210
Qy 181 REVIANGEIIFKLDGDIRTQFTWIKYFISFNTLSQSNIEERYKIQSYSEYKDFWGNP 240
Db 211 GNIHASNIMFKLDGCRDTHRYIWKYFNLFKELNEKEIKDLYDNQNSGILKDFWGDY 270
Qy 241 LMYNKEYMFNAGNKNYSYIKLKK-----DSPYGEILITRSKYNQNSKIYINRDLIYG 291
Db 271 LQYDKPYMLNDPNKYVDVNVNGVINGMYLKGPRGSVMTIYNLNS-----LYRG 323
Qy 292 EKFTIRKNSQSINDDIVKEDYIYLDFFNLNQWRVYTYFKKEEKLFLAPISDS 351
Db 324 TKFTIKRYASGN--KDNIVRNDRVYINVVYKNEKYLATNASQAGVEKILSALEIPDVG 381
Qy 352 ELYNTIOIKEYDEOP--TYSOLLFKKDEESTDEIGLIGIHRFYESGIVEEYKDYFCISK 410
Db 382 NLSQVVMKSKNDGQINCKM--NLQDNNGNDIGIGFHFQFNIA-----KLIVASN 431
Qy 411 WYKVEKRPYNLKGNCWQFIPKDEGWE 440
Db 432 WYNRQIERS--SRTLGCSEFIPVDGWE 459

RESULT 7
US-08-915-136-26
; Sequence 26, Application US/08915136
; Patent No. 6290960
; GENERAL INFORMATION:
; APPLICANT: KINK, JOHN A.
; APPLICANT: THALLEY, BRUCE S.
; APPLICANT: PADHYE, NISHA V.
; APPLICANT: FIRCA, JOSEPH R.
; APPLICANT: STAFFORD, DOUGLAS C.
; TITLE OF INVENTION: VACCINE AND ANTITOXIN FOR TREATMENT AND

/ TITLE OF INVENTION: PREVENTION OF C. DIFFICILE DISEASE
/ NUMBER OF SEQUENCES: 32
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: MEDLEN & CARROLL, LLP
/ STREET: 220 MONTGOMERY STREET, SUITE 2200
/ CITY: SAN FRANCISCO
/ STATE: CALIFORNIA
/ COUNTRY: UNITED STATES OF AMERICA
/ ZIP: 94104
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/915,136
/ FILING DATE:
/ CLASSIFICATION:
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: 08/480,604
/ FILING DATE:
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/405,496
/ FILING DATE: 16-MAR-1995
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/329,154
/ FILING DATE: 25-OCT-1994
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/161,907
/ FILING DATE: 02-DEC-1993
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 07/985,321
/ FILING DATE: 04-DEC-1992
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 07/429,791
/ FILING DATE: 31-OCT-1989
/ ATTORNEY/AGENT INFORMATION:
/ NAME: INGOLIA, DIANE E.
/ REGISTRATION NUMBER: 40,027
/ REFERENCE/DOCKET NUMBER: OPD-01763
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (415) 705-8410
/ TELEFAX: (415) 397-8338
/ INFORMATION FOR SEQ ID NO: 26:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 462 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
/ US-08-915-136-26

Query Match 35.4%; Score 831.5; DB 4; Length 462;
Best Local Similarity 40.0%; Pred. No. 5e-57;
Matches 180; Conservative 83; Mismatches 150; Indels 37; Gaps 10;

Qy 4 KYNSEILNLIILRYKNDNLIDLSYGAKVEYDGVLELN--DKNQFKLTSSANSKIRVT 61
Db 34 EYKNIINTSILNRVESNLIDLSRYASKINIGSKVNFDPDKNQIQLFNLESSKIEVI 93
Qy 62 QNQNIIFNSVFLDPSVFWIRIPKYKNDGQNTQYIHNEYTIINCMMNNSGWKISIRGNRII 121
Db 94 LKNAIVNMYENFSTFWIRIPKYN---SISLNNEYTIINCMMNNSGWKISIRGNRII 150
Qy 122 WTLTDINGKTYSFFEYNIREDISEYNIRFFVTIINN--LNNAKIYINGKLESNTDIKDI 180
Db 151 WTLQDTEIQRVVFKYSQMINISDIYNRIFWTIINNRLNNSKIYINGRLDQKPSNL 210
Qy 181 REVIANGEIIFKLDGDIRTQFTWIKYFISFNTLSQSNIEERYKIQSYSEYKDFWGNP 240
Db 211 GNIHASNIMFKLDGCRDTHRYIWKYFNLFKELNEKEIKDLYDNQNSGILKDFWGDY 270
Qy 241 LMYNKEYMFNAGNKNYSYIKLKK-----DSPYGEILITRSKYNQNSKIYINRDLIYG 291

Db 271 LOYDPRYYMLNDPNKYVDVNNVGIKRGVYMLKGRGSMVTNIIYNLS-----LYRG 323
QY 292 EKPIIRKSNSSINDIVRKEDYIYLDFFNINQEWRYVYKYKKEEKLFLAPISDS 351
Db 324 TKFIKKYASGN--KDNIVRNDRYIINVVYKKNRYLATNASQAGVEKILSALEIPDV 381
QY 352 ELYNTIQIKEYDEQP--TYSQCLLFKKDESDDEIGLIGHRFYSGIVFEYKDYFCISK 410
Db 382 NLSQVVMKSKNDQGITNCKM--NLQDNGNDIGFIGHFNIA-----KLVASN 431
QY 411 WYLKVKRXPYNKLGCONWQFIPKDEGTE 440
Db 432 WYNQIERS--SRTLGCSEWFIPIVDDGWGE 459

RESULT 8
US-08-480-604A-28
; Sequence 28, Application US/08480604A
; Patent No. 5736139
; GENERAL INFORMATION:
; APPLICANT: KINK, JOHN A.
; APPLICANT: THALLEY, BRUCE S.
; APPLICANT: PADHYE, NISHA V.
; APPLICANT: FIRCA, JOSEPH R.
; APPLICANT: STAFFORD, DOUGLAS C.
; TITLE OF INVENTION: VACCINE AND ANTITOXIN FOR TREATMENT AND
; PREVENTION OF C. DIFFICILE DISEASE
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL, LLP
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/480,604A
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/422,711
; FILING DATE: 14-APR-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/405,496
; FILING DATE: 16-MAR-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/329,154
; FILING DATE: 25-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/161,907
; FILING DATE: 02-DEC-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/985,321
; FILING DATE: 04-DEC-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/429,791
; FILING DATE: 31-OCT-1989
; ATTORNEY/AGENT INFORMATION:
; NAME: INGOLIA, DIANE E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: OPD-01763
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 28:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1296 amino acids
; TYPE: amino acid

; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-480-604A-28
Query Match 35.48; Score 831.5; DB 1; Length 1296;
Best Local Similarity 40.08; Pred. NO. 1.9e-56;
Matches 180; Conservative 83; Mismatches 150; Indels 37; Gaps 10;
QY 4 KNSBILNIIILNRYKNNLIDLSGYGAKVEYVDGVELN--DRNPKLTSSANSKIRVT 61
Db 868 EYKNIINTSILNRYESHLIDLRSYASKINIGSKVNFDPIDKNQIQLFNLESSKIEVI 927
QY 62 QNONIFISVFLDFSVFWRIPKPKNDGIONYIHNEYTIINCNNKNSGKISIRGNRII 121
Db 928 LKNAIVNSMYENFTFWIRPKYFN--SISLNNEYTIINCNNKNSGKISIRGNRII 984
QY 122 WTLIDINGTKSVFVEYINREDSIYINRWFFVTITNN--LNNAKIYINGKLESNTDIKDI 180
Db 985 WTLQDQTEIKQVRFKYSOMINISDIYINRWIFVTITNNLNSKIYINGRLIDQKPIISL 1044
QY 181 REVINGEELFKLDGIDRTQFIWMKYFSIFTELQSNIERYKIQSYSEYKDFWGNP 240
Db 1045 GNIHASNIMFKLDGCRDTHRYIWIKYFLFKELNEKEIKLDYDNOISGILKDFWGDY 1104
QY 241 LMYNKYYMKNAGNSYIKLKK-----DSPVGEILTRSKYNSKYNINRYDLYIG 291
Db 1105 LQYDKPYMLNLYDPKYYVDVNNVGIKRGVYMLKGRGSMVTNIIYNLS-----LYRG 1157
QY 292 EKPIIRKSNSSINDIVRKEDYIYLDFFNINQEWRYVYKYKKEEKLFLAPISDS 351
Db 1158 TKFIKKYASGN--KDNIVRNDRYIINVVYKKNRYLATNASQAGVEKILSALEIPDV 1215
QY 352 ELYNTIQIKEYDEQP--TYSQCLLFKKDESDDEIGLIGHRFYSGIVFEYKDYFCISK 410
Db 1216 NLSQVVMKSKNDQGITNCKM--NLQDNGNDIGFIGHFNIA-----KLVASN 1265
QY 411 WYLKVKRXPYNKLGCONWQFIPKDEGTE 440
Db 1266 WYNQIERS--SRTLGCSEWFIPIVDDGWGE 1293
RESULT 9
US-08-405-496A-28
; Sequence 28, Application US/08405496A
; Patent No. 5919665
; GENERAL INFORMATION:
; APPLICANT: WILLIAMS, JAMES A.
; TITLE OF INVENTION: VACCINE FOR CLOSTRIDIUM BOTULINUM
; TITLE OF INVENTION: NEUROTOXIN
; NUMBER OF SEQUENCES: 30
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL, LLP
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: USA
; ZIP: 94104
; COMPUTER READABLE FORM: disk
; MEDIUM TYPE: Floppy
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/405,496A
; FILING DATE: 16-MAR-1995
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/329,154
; FILING DATE: 25-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/161,907
; FILING DATE: 02-DEC-1993
; PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/985,321
FILING DATE: 04-DEC-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/429,791
FILING DATE: 31-OCT-1989
ATTORNEY/AGENT INFORMATION:
NAME: INGOLIA, DIANE E.
REGISTRATION NUMBER: 40,027
REFERENCE/DOCKET NUMBER: OPED-01308
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 28:
SEQUENCE CHARACTERISTICS:
LENGTH: 1296 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-405-496A-28

Query Match 35.4%; Score 831.5; DB 2; Length 1296;
Best Local Similarity 40.0%; Pred. No. 1.9e-56;
Matches 180; Conservative 83; Mismatches 150; Indels 37; Gaps 10;

QY 4 KYNEILNIIILNRYKNNLDLSGYGAKVEYDGVELN--DKNQFKLTSSANSKIRVT 61
Db 868 EYKNIINTSILNRYESNHLIDLSRYASKINIGSKYVNFDPIDKNQIOLFNLSSKIEVI 927
QY 62 QNQNIIENSVLDFSVFWIRIPKYKNDGIONYTHNEYTIINCNNKNSGKISIRGNRII 121
Db 928 LKNAIYNSMVENFSTFWIRIPKYFN---SISLNNEYTIINCNNKNSGKISIRGNRII 984
QY 122 WTLIDNGTKSVFFEYNIREDISEYINRWFFVTITNN--LNNAKIYINGKLESNTDIKI 180
Db 985 WTLQDTQEIQRVVEKYQSOMINISDYINRWIFVTITNNLNSKIYINGRLIDQKPISNL 1044
QY 181 REVIANGEIIFKLDGIDRTQFIWKKYFSINTELQSNTSEERYKIOSYSEYKLDPWGPN 240
Db 1045 GNTHASNIMFKLDCGRDTHRYIWKIFNLKELNEKEIKLDYDQNSGIIKDFWGDY 1104
QY 241 LMYNKYVMFNAGNKNYSIKLKK-----DSPVGEILTRSKYNQNSKIYINRDLIYG 291
Db 1105 LQYDKPYMLNLYDPNKYDVNVNNGVIRGYMYLKGPRGSMVTNIIYLNSS-----LYRG 1157
QY 292 EKPIIRKNSQSIINDIVRKEDIYLDFFNLQENWEVYVYKFKKEEKLFLAPISDS 351
Db 1158 TFEIIRKASGN--KDNIVRNDRVYINVVYKNKEYRLATNASQAGVEKLSALEIPDVG 1215
QY 352 ELYNTIQIKEYDEQP--TYSQCLLPKDEESTDEIGLIIHRFYESGIVFEYKDYFCISK 410
Db 1216 NLSQVYVMKSKNDQGITNCKRW--NLQDNNGNDIGFIFGHQFNIA-----KLVASN 1265
QY 411 WYLKVKRPYNKLGCKNQWQIFPKDEGWTE 440
Db 1266 WYNROIRS--SRTLGCSWEFIPVDDGWGE 1293

RESULT 10

US-08-915-136-28
Sequence 28, Application us/08915136
Patent No. 6290960

GENERAL INFORMATION:
APPLICANT: KINK, JOHN A.
APPLICANT: THALLEY, BRUCE S.
APPLICANT: FADHIE, NISHA V.
APPLICANT: FIRCA, JOSEPH R.
APPLICANT: STAFFORD, DOUGLAS C.
TITLE OF INVENTION: VACCINE AND ANTITOXIN FOR TREATMENT AND
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSEE: MEDLEN & CARROLL, LLP
STREET: 220 MONTGOMERY STREET, SUITE 2200

CITY: SAN FRANCISCO
STATE: CALIFORNIA
COUNTRY: UNITED STATES OF AMERICA
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/915,136
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/480,604
FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/405,496
FILING DATE: 16-MAR-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/329,154
FILING DATE: 25-OCT-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/161,907
FILING DATE: 02-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/985,321
FILING DATE: 04-DEC-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/429,791
FILING DATE: 31-OCT-1989
ATTORNEY/AGENT INFORMATION:
NAME: INGOLIA, DIANE E.
REGISTRATION NUMBER: 40,027
REFERENCE/DOCKET NUMBER: OPED-01763
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 28:
SEQUENCE CHARACTERISTICS:
LENGTH: 1296 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-915-136-28

Query Match 35.4%; Score 831.5; DB 4; Length 1296;
Best Local Similarity 40.0%; Pred. No. 1.9e-56;
Matches 180; Conservative 83; Mismatches 150; Indels 37; Gaps 10;

QY 4 KYNEILNIIILNRYKNNLDLSGYGAKVEYDGVELN--DKNQFKLTSSANSKIRVT 61
Db 868 EYKNIINTSILNRYESNHLIDLSRYASKINIGSKYVNFDPIDKNQIOLFNLSSKIEVI 927
QY 62 QNQNIIENSVLDFSVFWIRIPKYKNDGIONYTHNEYTIINCNNKNSGKISIRGNRII 121
Db 928 LKNAIYNSMVENFSTFWIRIPKYFN---SISLNNEYTIINCNNKNSGKISIRGNRII 984
QY 122 WTLIDNGTKSVFFEYNIREDISEYINRWFFVTITNN--LNNAKIYINGKLESNTDIKI 180
Db 985 WTLQDTQEIQRVVEKYQSOMINISDYINRWIFVTITNNLNSKIYINGRLIDQKPISNL 1044
QY 181 REVIANGEIIFKLDGIDRTQFIWKKYFSINTELQSNTSEERYKIOSYSEYKLDPWGPN 240
Db 1045 GNTHASNIMFKLDCGRDTHRYIWKIFNLKELNEKEIKLDYDQNSGIIKDFWGDY 1104
QY 241 LMYNKYVMFNAGNKNYSIKLKK-----DSPVGEILTRSKYNQNSKIYINRDLIYG 291
Db 1105 LQYDKPYMLNLYDPNKYDVNVNNGVIRGYMYLKGPRGSMVTNIIYLNSS-----LYRG 1157
QY 292 EKPIIRKNSQSIINDIVRKEDIYLDFFNLQENWEVYVYKFKKEEKLFLAPISDS 351
Db 1158 TFEIIRKASGN--KDNIVRNDRVYINVVYKNKEYRLATNASQAGVEKLSALEIPDVG 1215

QY 352 ELYNTIQIKEYDEQ-TYSCQLLFKKDEESTDEIGLIGHRFYSGIVFEYKYDFCISK 410
 Db 1216 NLSQVVMKSKNDQGITNCKK--NLQDNGNDIGFISGHQFNIA-----KLVASN 1365
 QY 411 WYLVKRPYNLKLGCNWFQPKDEGHT 440
 Db 1266 WYNQRIERS--SRTLGCSWEFIPVDDGNGE 1293

RESULT 11
 US-07-618-312A-2
 ; Sequence 2, Application US/07618312A
 ; Patent No. 5385540
 ; GENERAL INFORMATION:
 ; APPLICANT: Makoff Dr, Andrew J
 ; APPLICANT: Romanos Dr, Michael A
 ; APPLICANT: Clare Dr, Jeffrey J
 ; APPLICANT: Fairweather Dr, Neil F
 ; TITLE OF INVENTION: VACCINES
 ; NUMBER OF SEQUENCES: 13
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: 14th Floor
 ; STREET: 2200 Clarendon Boulevard,
 ; CITY: Arlington,
 ; STATE: Virginia
 ; COUNTRY: U.S.A.
 ; ZIP: 22201

COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patent In Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/07/618,312A
 FILING DATE: 19910516
 CLASSIFICATION: 424
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: GB 8926832.0
 FILING DATE: 28-NOV-1989
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: GB 9006097.1
 FILING DATE: 17-MAR-1990
 ATTORNEY/AGENT INFORMATION:
 NAME: Crawford Mr, Arthur R
 REGISTRATION NUMBER: 25,327
 REFERENCE/DOCKET NUMBER: 510-51
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 0101 703 8750400
 TELEFAX: 0101 703 5253468
 TELEX: 200797 NIXN UR
 INFORMATION FOR SEQ ID NO: 2:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 452 amino acids
 TYPE: AMINO ACID
 TOPOLOGY: linear
 MOLECULE TYPE: protein

US-07-618-312A-2
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 Best Local Similarity 32.2%; Pred. No. 1.2e-38;
 Matches 142; Conservative 88; Mismatches 183; Indels 28; Gaps 12;

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 Db 434 K-----ILGCDWYFVPTDEGWT 450

RESULT 12
 US-08-280-228-2
 ; Sequence 2, Application US/08280228
 ; Patent No. 5571694
 ; GENERAL INFORMATION:
 ; APPLICANT: Makoff Dr, Andrew J
 ; APPLICANT: Romanos Dr, Michael A
 ; APPLICANT: Clare Dr, Jeffrey J
 ; APPLICANT: Fairweather Dr, Neil F
 ; TITLE OF INVENTION: VACCINES
 ; NUMBER OF SEQUENCES: 13
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: NIXON & VANDERHVE P.C.
 ; STREET: 1100 No. 5571694th Glebe Road
 ; CITY: Arlington,
 ; STATE: Virginia
 ; COUNTRY: U.S.A.
 ; ZIP: 22201-4714
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patent In Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/280,228
 FILING DATE: 25-JUL-1994
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/618,312
 FILING DATE: 27-NOV-1990
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: GB 8926832.0
 FILING DATE: 28-NOV-1989
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: GB 9006097.1
 FILING DATE: 17-MAR-1990
 ATTORNEY/AGENT INFORMATION:
 NAME: Wilson, Mary J.
 REGISTRATION NUMBER: 32,955
 REFERENCE/DOCKET NUMBER: 117-163
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (703) 816-4000
 TELEFAX: (703) 816-4100
 TELEX: 200797 NIXN UR
 INFORMATION FOR SEQ ID NO: 2:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 452 amino acids
 TYPE: amino acid
 TOPOLOGY: linear


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; MOLECULE TYPE: protein
; US-08-280-228-2
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; Query Match 25.3%; Score 595; DB 1; Length 452;
; Best Local Similarity 32.2%; Pred. No. 1.2e-38;
; Matches 142; Conservative 88; Mismatches 183; Indels 28; Gaps 12;
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; Sequence 4, Application US/07618312A
; Patent No. 5389540
; GENERAL INFORMATION:
; APPLICANT: Makoff Dr, Andrew J
; APPLICANT: Romanos Dr, Michael A
; APPLICANT: Clare Dr, Jeffrey J
; APPLICANT: Fairweather Dr, Neil F
; TITLE OF INVENTION: VACCINES
; NUMBER OF SEQUENCES: 13
; CORRESPONDENCE ADDRESS:
; ADDRESS: 14th Floor
; STREET: 2200 Clarendon Boulevard,
; CITY: Arlington,
; STATE: Virginia
; COUNTRY: U.S.A.
; ZIP: 22201
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/618,312A
; FILING DATE: 19910516
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: GB 8926832.0
; FILING DATE: 28-NOV-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: GB 9006097.1
; FILING DATE: 17-MAR-1990
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; Query Match 25.3%; Score 594; DB 1; Length 452;
; Best Local Similarity 32.0%; Pred. No. 1.5e-38;
; Matches 141; Conservative 89; Mismatches 183; Indels 28; Gaps 12;
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; RESULT 14
; US-08-280-228-4
; Sequence 4, Application US/08280228
; Patent No. 5571694
; GENERAL INFORMATION:
; APPLICANT: Makoff Dr, Andrew J
; APPLICANT: Romanos Dr, Michael A
; APPLICANT: Clare Dr, Jeffrey J
; APPLICANT: Fairweather Dr, Neil F
; TITLE OF INVENTION: VACCINES
; NUMBER OF SEQUENCES: 13
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: NIXON & VANDERHIVE P.C.
; STREET: 1100 No. 5571694th Glebe Road
; CITY: Arlington,
; STATE: Virginia
; COUNTRY: U.S.A.
; ZIP: 22201-4714
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk

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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/280,228
FILING DATE: 25-JUL-1994
CLASSIFICATION: 435
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: US 07/618,312
FILING DATE: 27-NOV-1990
CLASSIFICATION: 435
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: GB 8926832.0
FILING DATE: 28-NOV-1989
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: GB 9006097.1
FILING DATE: 17-MAR-1990
ATTORNEY/AGENT INFORMATION:
NAME: Wilson, Mary J.
REGISTRATION NUMBER: 32,955
REFERENCE/DOCKET NUMBER: 117-163
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 816-4000
TELEFAX: (703) 816-4100
TELEX: 200797 NIXN UR
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 452 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-280-228-4

Query Match 25.3%; Score 594; DB 1; Length 452;
Best Local Similarity 32.0%; Pred. No. 1.5e-38;
Matches 141; Conservative 89; Mismatches 183; Indels 28; Gaps 12;

QY 14 ILNLRKDNNDLIDSGYAKVEYVDGVEL----NDKNQFKLTSSANGSKIRVTQONIFN 69
DB 23 ILNLDINDNDISDISGNSSVITPDQALVPGINGK-AIHLVNSESSEVIVHKAMDIEYN 81
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Application US/08668381A
Sequence 5

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Search completed: November 1, 2002, 08:17:44
Job time : 30 secs

GenCore version 5.1.3
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OM protein - protein search, using sw model

Run on: November 1, 2002, 08:17:28 ; Search time 31 Seconds

(without alignments)
196.854 Million cell updates/sec

Title: US-09-910-186a-8

Perfect score: 2350

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Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 90412 seqs, 13869272 residues

Total number of hits satisfying chosen parameters: 90412

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA:

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- 2: /cgn2.6/ptodata/2/pubpaa/PCT_NEW_PUB.pcp.*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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2	826.5	35.2	425	US-09-288-326-9	Sequence 9, Appli
3	732	31.1	431	US-08-981-087A-1	Sequence 1, Appli
4	318	13.5	144	US-08-981-087A-2	Sequence 2, Appli
5	284.5	12.1	144	US-08-981-087A-3	Sequence 3, Appli
6	149.5	6.4	1086	US-09-924-154-15	Sequence 15, Appli
7	149	6.3	143	US-08-981-087A-4	Sequence 4, Appli
8	144	6.1	996	US-09-815-242-5251	Sequence 5251, Ap
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11	121	5.1	609	US-09-815-242-13683	Sequence 13683, A
12	121	5.1	1421	US-09-924-154-13	Sequence 13, Appli
13	112.5	4.8	406	US-09-765-205-8	Sequence 8, Appli
14	110.5	4.7	1093	US-09-801-368-392	Sequence 392, App
15	110	4.7	751	US-09-881-752A-280	Sequence 280, App
16	110	4.7	841	US-09-815-242-5779	Sequence 5779, Ap
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18	110	4.7	866	US-09-815-242-11373	Sequence 11373, A
19	109.5	4.7	829	US-09-801-368-324	Sequence 324, App

20	109.5	4.7	1018	10	US-09-815-242-5797	Sequence 5797, Ap
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22	108	4.6	1143	10	US-09-924-154-14	Sequence 14, Appli
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26	105.5	4.5	358	10	US-09-861-451A-50	Sequence 50, Appli
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38	102	4.3	389	10	US-09-816-028A-34	Sequence 34, Appli
39	102	4.3	835	10	US-09-801-574-22	Sequence 22, Appli
40	101.5	4.3	2026	10	US-09-801-368-86	Sequence 86, Appli
41	101	4.3	555	8	US-08-808-031A-31	Sequence 31, Appli
42	101	4.3	586	8	US-08-808-031A-28	Sequence 28, Appli
43	100.5	4.3	516	10	US-09-986-676A-2	Sequence 2, Appli
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45	100.5	4.3	972	10	US-09-924-154-16	Sequence 16, Appli

ALIGNMENTS

RESULT 1
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; Sequence 1, Application US/09726949A
; Patent No. US20020137886A1
; GENERAL INFORMATION:
; APPLICANT: Allergan, Inc.
; APPLICANT: Lin, Wei-Jen
; APPLICANT: Aoki, Kei-Roger
; APPLICANT: Steward, Lance E.
; TITLE OF INVENTION: NEUROTOXINS WITH ENHANCED TARGET SPECIFICITY
; FILE REFERENCE: 36121-20002.00
; CURRENT APPLICATION NUMBER: US/09/736,949A
; CURRENT FILING DATE: 2000-11-29
; NUMBER OF SEQ ID NOS: 1
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 1295
; TYPE: PRT
; ORGANISM: Clostridium botulinum
US-09-726-949A-1

Query Match 35.4%; Score 831.5; DB 10; Length 1295;
Best Local Similarity 40.0%; Pred. No. 6.1e-58;
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; Sequence 9, Application US/09288326
; Patent No. US20010018049A1
; GENERAL INFORMATION:
; APPLICANT: George Sachs
; TITLE OF INVENTION: Method and Compositions for the
; FILE REFERENCE: 17282
; CURRENT APPLICATION NUMBER: US/09/288,326
; CURRENT FILING DATE: 1999-04-08
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: FastSeq for Windows Version 3.0
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; ORGANISM: Clostridium botulinum
US-09-288-326-9
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Best Local Similarity 40.2%; Pred. No. 4e-58;
Matches 179; Conservative 82; Mismatches 147; Indels 37; Gaps 10;
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QY 127 INGTKTSVFYEYNIREDISBYINRWFFVTITNN--LNNAKIYINGKLESNTDKIDREVIA 185
Db 119 TOEIKQVRVFKYSQMINISDYINRWIFVTITNNLNNSKIYINGRLIDQKP-SNLGNTHA 178
QY 186 NGEIFKLDGDIRTOFTWPKYSIFNTLSQNSIEERKIOSYSEYLDKDFWGNPLMYNK 245
Db 179 SNNIMFKLDGDRTHRIWIKYNFLPKELNEIKDLQNSNSILKDFGDIYLDK 238
QY 246 EYFMENAGNKNYSIKLKK-----DSPVGBILTRSKYNQNSKYNYRDLIYGEKFTI 296
Db 239 PYMLNLDPNKYVDVNVNGIRGMYMLKGRGSGVMTNIYLNSS-----LYRGTFKFI 291
QY 297 RKNSQSINDIVRKEDYIYDLFFNINQWRVYTYKYFKKEBKFLAPISDSDELYNT 356
Db 292 KKYASGN--KDNIVRNRDRVYINVVKNKEYRLATNASQAGVEKILSALEIPVGNLSOV 349
QY 357 IOIKEYDEOP--TYSCLLFKKDEESTDEIGLIGHRFYESGIVFEYKDYFCISKWYLKE 415
Db 350 VYMKSKNDQGITNKCKM--NLQDNGNDIGFIGHQFNNTA-----KLVASNWNQ 399
QY 416 VKRKPYNLKLGNWQFIPKDEGWE 440
Db 400 FERS--SRTLGCSEWEPVDDGWGE 422

RESULT 3
US-08-981-087A-1
; Sequence 1, Application US/08981087A
; Patent No. US20020081304A1
; GENERAL INFORMATION:
; APPLICANT: Elmore, Michael J.
; APPLICANT: Mauchline, Margaret L.
; APPLICANT: Minton, Nigel P.
; APPLICANT: Pasechnik, Vladimir A.
; APPLICANT: Titball, Richard W.
; TITLE OF INVENTION: TYPE F BOTULINUM TOXIN AND USE THEREOF
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: NIXON & VANDERHYE P.C.
; STREET: 1100 No. US20020081304Alth Glebe Rd. 8th floor
; CITY: Arlington
; STATE: VA
; COUNTRY: USA
; ZIP: 22201-4741
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/981.087A
; FILING DATE: 27-MAY-1998
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/GB96/01409
; FILING DATE: 12-JUN-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: GB 9511909.5
; FILING DATE: 12-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Crawford, Arthur R.
; REGISTRATION NUMBER: 25,327
; REFERENCE/DOCKET NUMBER: 124-688
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-816-4000
; TELEFAX: 703-816-4100
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 431 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-981-087A-1
Query Match 31.1%; Score 732; DB 8; Length 431;
Best Local Similarity 35.2%; Pred. No. 1.2e-50;
Matches 161; Conservative 88; Mismatches 149; Indels 60; Gaps 13;
QY 3 KYNSEITNLIILRYKNNLDLGSYGAKVEYDGVEL--NDRNQFKLTSSANSKIRV 60
Db 13 NKLYKKKIDNSILDMRYENKKNFIDISYGSNISINGDVIIYSTNRNQFGIYSSKPSVNI 72
QY 61 TQONQIIFNSVFLDFSFWIRIPKYNQNGIQNYIHNEYTIINCMM--NNSGKISIRGNR 119
Db 73 AQNDIITYNGRYQNFISFVWRIPKYNF--KVNLNNEYTIIDICINNNSGKISILNKN 129
QY 120 IITWFLIDINGKTSVFYEYNIREDISBYINRWFFVTITNN--LNNAKIYINGKLESNTDK 178
Db 130 IITWFLQDTAGNNKLVENYQMTISDYNKWIIFVTITNNLNSRIYINGNLIDEKSFIS 189
QY 179 DIREVIANGELIIFKLDGDIRTOFTWPKYSIFNTLSQNSIEERKIOSYSEYLDKDFW 238
Db 190 NLGDIHVSNDILFKIVGCD--TRYVGIRYFKVEDTELKGTETIETLYSDEPFSILKDFW 248
QY 239 NPLMYNKEYMFMAGNKNYSIKLKKDSPVGBILTRSKYNQNSKYINVRD----- 287

Db 249 NVLLYNKRYLLNL-----LRTDKSI-----TONSNELINQORGVYQKPNIF 291
QY 288 ---LVIGKEFIIRKSNOSIN-DDIVRKEDYIYLDFFNLNOEWVVYKYFKKEEKL 342
Db 292 SNTRLTYGVEVIRKNGSDISNTDNFRKNDLAYINVVDROVRYLADISIAKPKII 351
QY 343 FLAPISDSDELNTIQIKEYDRQPTYSQQLFKKDEESTDEIGLIGHRFYVESGIVFEY 402
Db 352 KLRTSNNSNLGOIIVM---DSIGNNCTMNFQNN--NGGNIGLLGFH----- 394
QY 403 KDFECISKWLEKVRKPKYNLKLGCNWOIFPKDEGWE 440
Db 395 SNNLVASSWYNNIRKN--TSSNGCFWFSFISKEHGWE 430

RESULT 4

US-08-981-087A-2
; Sequence 2, Application US/08981087A
; Patent No. US20020081304A1
; GENERAL INFORMATION:
; APPLICANT: Elmore, Michael J.
; APPLICANT: Mauchline, Margaret L.
; APPLICANT: Minton, Nigel P.
; APPLICANT: Pasechnik, Vladimir A.
; APPLICANT: Titball, Richard W.
; TITLE OF INVENTION: TYPE F BOTULINUM TOXIN AND USE THEREOF
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: NIXON & VANDERHYE P.C.
; STREET: 1100 No. US20020081304A1th Glebe Rd. 8th floor
; CITY: Arlington
; STATE: VA
; COUNTRY: USA
; ZIP: 22201-4741
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/981,087A
; FILING DATE: 27-MAY-1998
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/GB96/01409
; FILING DATE: 12-JUN-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: GB 9511909.5
; FILING DATE: 12-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Crawford, Arthur R.
; REGISTRATION NUMBER: 25,327
; REFERENCE/DOCKET NUMBER: 124-688
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-816-4000
; TELEFAX: 703-816-4100
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 144 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-981-087A-2

Query Match 13.5%; Score 319; DB 8; Length 144;
Best Local Similarity 45.2%; Pred. No. 1.4e-18;
Matches 61; Conservative 33; Mismatches 35; Indels 6; Gaps 3;

QY 3 KYNSEILNIIILNRKDKNNLIDLSGYGAKVVDGVDEL--NDKNQPKLTSSANSKIRV 60
Db 13 NKLYKKIKDINSILDYRNKFNKFDISGYSGNISINDGVYISTNRNQGFIYSKPKSEVNI 72

QY 61 TQONLIIFNSVFLDSVSWFTRIPRYKNDGTONYIHNEYTIINCMK NNSGWKISIRGNR 119
Db 73 AQONDIYNGRYQNESISFWVRIPKRYFN---KVLNNEYTTIDICIRNNSGWKISLNYK 129
QY 120 IITWLTIDINGTKSV 134
Db 130 IITWLTODTAGNCKL 144

RESULT 5

US-08-981-087A-3
; Sequence 3, Application US/08981087A
; Patent No. US20020081304A1
; GENERAL INFORMATION:
; APPLICANT: Elmore, Michael J.
; APPLICANT: Mauchline, Margaret L.
; APPLICANT: Minton, Nigel P.
; APPLICANT: Pasechnik, Vladimir A.
; APPLICANT: Titball, Richard W.
; TITLE OF INVENTION: TYPE F BOTULINUM TOXIN AND USE THEREOF
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: NIXON & VANDERHYE P.C.
; STREET: 1100 No. US20020081304A1th Glebe Rd. 8th floor
; CITY: Arlington
; STATE: VA
; COUNTRY: USA
; ZIP: 22201-4741
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/981,087A
; FILING DATE: 27-MAY-1998
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/GB96/01409
; FILING DATE: 12-JUN-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: GB 9511909.5
; FILING DATE: 12-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Crawford, Arthur R.
; REGISTRATION NUMBER: 25,327
; REFERENCE/DOCKET NUMBER: 124-688
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-816-4000
; TELEFAX: 703-816-4100
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 144 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-981-087A-3

Query Match 12.1%; Score 284.5; DB 8; Length 144;
Best Local Similarity 39.3%; Pred. No. 6e-16;
Matches 59; Conservative 27; Mismatches 45; Indels 19; Gaps 4;

QY 136 FEYNIREDISYINRWFVTITNN-LNNAKIVNGKLESNTDIDKIDREVIANGEIIFKLD 194
Db 2 FNTQMTISIDYINKWIFVTITNNRNGSRIVYINGMLIDEKISINLGDHVSNDLFLKIV 61
QY 195 GDIDRTQFIWMKYFSINTELSQSNIETERYKIQSYSEYKDKFWGNPLMYNKYYWFNAGN 254
Db 62 GCND-IRYVGIRYFKVDELTGKTETIETIYSDPDSILKDFWGNVLLYNKRYLLNL-- 118
QY 255 KNSYIKLKDSPPVGEILTRSKYNQNSKYIN 284

Db 119 -----LRTDKSI-----TQNSFLN 133

RESULT 6

JS-09-924-154-15

Sequence 15, Application US/09924154

Patent No. US20020127241A1

GENERAL INFORMATION:

APPLICANT: Narum, David L.

APPLICANT: Sim, Kim L.

TITLE OF INVENTION: Anti-Plasmodium Compositions and Methods of Use

FILE REFERENCE: 05213-0465 43170-262105

CURRENT APPLICATION NUMBER: US/09/924.154

CURRENT FILING DATE: 2001-08-07

PRIOR APPLICATION NUMBER: US 60/223,525

PRIOR FILING DATE: 2000-08-07

NUMBER OF SEQ ID NOS: 17

SOFTWARE: Patent in version 3.1

SEQ ID NO 15

LENGTH: 1086

TYPE: PRT

ORGANISM: Mammalian

US-09-924-154-15

Query Match 6.4%; Score 149.5; DB 10; Length 1086;

Best Local Similarity 20.5%; Pred. No. 0.00028;

Matches 89; Conservative 66; Mismatches 138; Indels 141; Gaps 21;

QY 6 NSEILNIIILRYKD---NNLID-LSGYGAKVEYDGVGLNDKNQFKLTSSANSKIRVT 61

Db 7 SKSIIRKQVDISIKDFEKNKFDIYSLYEGCKIKEMKWTCTDNQFK---SNNLCAPIR 63

QY 62 QNONIFNSVFDVFSVPWIRIPKYKNDGIONYIHNEYTIINCMKNNSGWKISIRGNRII 121

Db 64 RIQLCIVNIIILFSENEYI---YKNDISNNKF--KENILKAVKLESNLLVQKHNN--- 114

QY 122 WTLIDNGTKSVFFVEYINR--EDISEVINRWFVTITNLLNNAKIVNGKLENTDIKD 179

Db 115 -----EYNSKLCDDI-----RNSFL-----D 130

QY 180 IREVIANGSIIFKLDGIDRTOFIWKKYFSIFNTELS-----QSNIE----- 221

Db 131 YGDIIIGRLDIYK-----NNTDYIREQFKFIFFNNEYNLNNELNDELNDELNDELNDELN 185

QY 222 --ERYKIQSYSEVLKDF-----WGNPLMYNKVEYMFENAGNK 255

Db 186 WBEKYKEDIWEKTEHNDKFKIECKYFAKDEPQIVRWIEWSQFIDERNYMLFTL--R 243

QY 256 NSYIKLKDSVPVGEILTRSKYNQNSKYINRYD---LYIGCKF-IIRKRSQSINDDIVR 311

Db 244 NTYNEM-----NIHENCKOYNKQVNRKKETWFLSNFENKIFPERNVQIHSNIFK 296

QY 312 --KEDYIYLDFFNLNQEWRVYTYKFKKEEKL-----FLAPISDSDELYNTIQIKEY 362

Db 297 EYKENVVDIIFGTN-----YBNNFCKEKPVLVSAAYNKLKAPNAKSPRIYKS---KEH 348

QY 363 DEQPTYSCQLLFFK 376

Db 349 EESSVFGCKTKISK 362

RESULT 7

US-08-981-087A-4

Sequence 4, Application US/08981087A

Patent No. US20020081304A1

GENERAL INFORMATION:

APPLICANT: Elmore, Michael J.

APPLICANT: Mauchline, Margaret L.

APPLICANT: Minton, Nigel P.

APPLICANT: Pasechnik, Vladimir A.

APPLICANT: Titball, Richard W.

TITLE OF INVENTION: TYPE F BOTULINUM TOXIN AND USE THEREOF

NUMBER OF SEQUENCES: 6

CORRESPONDENCE ADDRESS:

ADDRESSEE: NIXON & VANDERHYE P.C.

STREET: 1100 No. US20020081304A1th Glebe Rd. 8th floor

CITY: Arlington

STATE: VA

COUNTRY: USA

ZIP: 22201-4741

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/981,087A

FILING DATE: 27-MAY-1998

CLASSIFICATION: 424

PRIOR APPLICATION DATA:

APPLICATION NUMBER: PCT/GB96/01409

FILING DATE: 12-JUN-1996

PRIOR APPLICATION DATA:

APPLICATION NUMBER: GB 9511909.5

FILING DATE: 12-JUN-1995

ATTORNEY/AGENT INFORMATION:

NAME: Crawford, Arthur R.

REGISTRATION NUMBER: 25,327

REFERENCE/DOCKET NUMBER: 124-688

TELECOMMUNICATION INFORMATION:

TELEPHONE: 703-816-4000

TELEFAX: 703-816-4100

INFORMATION FOR SEQ ID NO: 4:

SEQUENCE CHARACTERISTICS:

LENGTH: 143 amino acids

TYPE: amino acid

STRANDEDNESS:

TOPOLOGY: linear

MOLECULE TYPE: peptide

US-08-981-087A-4

Query Match 6.3%; Score 149; DB 8; Length 143;

Best Local Similarity 26.6%; Pred. No. 2.9e-05;

Matches 41; Conservative 28; Mismatches 65; Indels 20; Gaps 5;

QY 288 LVIGBKFIIRKRSQSIN-DDIVRKEDYIYLDFFNLNQEWRVYTYKFKKEEKLFLAP 346

Db 8 LVIGVEIIRKNGSTDISNTDNFVRKNDLAYINVVDREYRLYADISIAKPEKIIKLIR 67

QY 347 ISDSDELYNTIQIKEYDQPTYSQCLLFKDEESTDEIGLIGIHRFYESGIVFEYKDYF 406

Db 68 TSNNSNSLGLIIVM---DSIGNNCTMNFQNN--NGGNLGLGFH-----SNNL 110

QY 407 CISKWLKVEKRPYNLKLGCNMQPIPKDEGWTE 440

Db 111 VASSWYNNIRKN--TSSNGCFWSPISKEHGWE 142

RESULT 8

US-09-815-242-5251

Sequence 5251, Application US/09815242

Patent No. US20020061569A1

GENERAL INFORMATION:

APPLICANT: Haselbeck, Robert

APPLICANT: Ohlsen, Kari L.

APPLICANT: Zyskind, Judith W.

APPLICANT: Wall, Daniel

APPLICANT: Trawick, John D.

APPLICANT: Carr, Grant J.

APPLICANT: Yamamoto, Robert T.

APPLICANT: Xu, H. Howard

TITLE OF INVENTION: Identification of Essential Genes in

TITLE OF INVENTION: Prokaryotes

FILE REFERENCE: ELTRA.011A

CURRENT APPLICATION NUMBER: US/09/815,242

CURRENT FILING DATE: 2001-03-21

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; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-03-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; NUMBER OF SEQ ID NOS: 14110
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5251
; LENGTH: 996
; TYPE: PRT
; ORGANISM: Staphylococcus aureus
; US-09-815-242-5251

Query Match          6.1%; Score 144; DB 10; Length 996;
Best Local Similarity 21.0%; Pred. No. 0.0007;
Matches 106; Conservative 82; Mismatches 155; Indels 162; Gaps 28;

QY 3 NKNYSEILNNIILRYKD-----NNLIDLSGYGAKVEYVDGVELNDKNQFKLTSSAN 55
Db 386 NKYOQSYLN--IERLRTEDEQGLDELNNLIK-----GLEKVEDSIGNESDYEKIIEI 438

QY 56 SKIRVTQNONIIFNSVFLDSFVIRIPRYKND-----GIONTHNEYTIINCMK 106
Db 439 AITNINNEINVIKEN-----EKADKLDKLLGSKQELNQEINEKTI---LK 482

QY 107 NNSGWKISIRGNRIIWLIDINGKTKSVFFEY-----NIREDISVINRW 152
Db 483 N-----LEIKDRYDKSKLDNDK--BSFISEIKSAVKIGDQCPICGNEIQDLGHHID--- 533

QY 153 FVTITNNLNNAK-IYIN-GKLES-----NTDINDIREVANGIEIFKLDGDDRTQFIWM 205
Db 534 FDSIAKQNEIKELIANIHTMESIAVHSEIKFVNEKISN--INIKTQSDLS----- 584

QY 206 KYFSIFNTEL--SQSNIERYKIQSYSEVLKDFWGNPLM--YNKEYYMFNAGKN-SYIK 260
Db 585 --LEVLNKRLLLENALNNORDLNKFIQMKKEKNLTQIHNKQLRL---KNNESELK 638

QY 261 LKQDSPVGEILTTSKYN-----QNSKYINVRDLYIGKFIIR-- 298
Db 639 ICRNL-ITEFETLSKYNNTNFVDYKKIYQDVNQHQEHSNQIEDKLIQLSORKLIEQNN 697

QY 299 ----KNSQSINDIVRKEDIYILDFNLMQ-----EWR-----VYTYK 333
Db 698 LNHYNQLETYNNDLENEQSIEMESRLNLTDDNDINEIARWGQEELEQKRDYTKR 757

QY 334 YFKKEEKLFLAPIS-----DSDELYNTIQIE-----YDEQPT--YSCQLLKKDEE 379
Db 758 YHEFEMEIALESUTKDKKELSDSKLDKDDYELAKGKMTLIDEYSAVHYQCONNIKTQS 817

QY 380 STDEIGLIGHRFYESGIVFEEYKD 404
Db 818 IVSHINYLN-----QELKD 831

RESULT 9
US-09-815-242-12141
; Sequence 12141, Application US/09815242
; Patent No. US2002061569A1
; GENERAL INFORMATION:
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Karl L.
; APPLICANT: Zyskind, Judith W.
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John D.
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; APPLICANT: Carr, Grant J.
; APPLICANT: Yamamoto, Robert T.
; TITLE OF INVENTION: Identification of Essential Genes in
; TITLE OF INVENTION: Prokaryotes
; FILE REFERENCE: ELITRA.011A
; CURRENT APPLICATION NUMBER: US/09/815,242
; CURRENT FILING DATE: 2001-03-21
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; NUMBER OF SEQ ID NOS: 14110
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12141
; LENGTH: 1009
; TYPE: PRT
; ORGANISM: Staphylococcus aureus
; US-09-815-242-12141

Query Match          6.1%; Score 144; DB 10; Length 1009;
Best Local Similarity 21.0%; Pred. No. 0.00071;
Matches 106; Conservative 82; Mismatches 155; Indels 162; Gaps 28;

QY 3 NKNYSEILNNIILRYKD-----NNLIDLSGYGAKVEYVDGVELNDKNQFKLTSSAN 55
Db 386 NKYOQSYLN--IERLRTEDEQGLDELNNLIK-----GLEKVEDSIGNESDYEKIIEI 438

QY 56 SKIRVTQNONIIFNSVFLDSFVIRIPRYKND-----GIONTHNEYTIINCMK 106
Db 439 AITNINNEINVIKEN-----EKADKLDKLLGSKQELNQEINEKTI---LK 482

QY 107 NNSGWKISIRGNRIIWLIDINGKTKSVFFEY-----NIREDISVINRW 152
Db 483 N-----LEIKDRYDKSKLDNDK--BSFISEIKSAVKIGDQCPICGNEIQDLGHHID--- 533

QY 153 FVTITNNLNNAK-IYIN-GKLES-----NTDINDIREVANGIEIFKLDGDDRTQFIWM 205
Db 534 FDSIAKQNEIKELIANIHTMESIAVHSEIKFVNEKISN--INIKTQSDLS----- 584

QY 206 KYFSIFNTEL--SQSNIERYKIQSYSEVLKDFWGNPLM--YNKEYYMFNAGKN-SYIK 260
Db 585 --LEVLNKRLLLENALNNORDLNKFIQMKKEKNLTQIHNKQLRL---KNNESELK 638

QY 261 LKQDSPVGEILTTSKYN-----QNSKYINVRDLYIGKFIIR-- 298
Db 639 ICRNL-ITEFETLSKYNNTNFVDYKKIYQDVNQHQEHSNQIEDKLIQLSORKLIEQNN 697

QY 299 ----KNSQSINDIVRKEDIYILDFNLMQ-----EWR-----VYTYK 333
Db 698 LNHYNQLETYNNDLENEQSIEMESRLNLTDDNDINEIARWGQEELEQKRDYTKR 757

QY 334 YFKKEEKLFLAPIS-----DSDELYNTIQIE-----YDEQPT--YSCQLLKKDEE 379
Db 758 YHEFEMEIALESUTKDKKELSDSKLDKDDYELAKGKMTLIDEYSAVHYQCONNIKTQS 817

QY 380 STDEIGLIGHRFYESGIVFEEYKD 404
Db 818 IVSHINYLN-----QELKD 831

RESULT 10
US-09-774-414-3
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RESULT 12
US-09-924-154-13
; Sequence 13, Application US/09924154
; Patent No. US2002012741A1
; GENERAL INFORMATION:
; APPLICANT: Narum, David L.
; APPLICANT: Sim, Kim L.
; TITLE OF INVENTION: Anti-Plasmodium Compositions and Methods of Use
; FILE REFERENCE: 05213-0465 43170-262105
; CURRENT APPLICATION NUMBER: US/09/924,154
; CURRENT FILING DATE: 2001-08-07
; PRIOR APPLICATION NUMBER: US 60/223,525
; PRIOR FILING DATE: 2000-08-07
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 13
; LENGTH: 1421
; TYPE: PRT

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151 WFFVTITNNLNNAKIYINGKLESNTDIKDIREVIANGEI-----IFK 1922

Db 282 PLQFFPIPTNLQKNVAI

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QY 199 RTQ-----FIWKVFSIFN-----TELSSNIEERY-----KIQSYSEVLKD 235
Db 342 SOQQOQHHEYJTNFNHSMDSITNGSKRRKLNOSQOQFYNOOEKIQRFKLMKQ 401
QY 236 --FW--GNPLMYNEYMFGNAGNSYIKLKKDPSVGEIILTRSKYNQNSKIYINRDL 288
Db 402 PLLWQSFQPNPDHNEYCDNSGNNNTVASNGSSI-EVFS-SNENDNSNMMSRSM 457

RESULT 15
US-09-881-752A-280
; Sequence 280, Application US/09881752A
; Patent No. US20020115078A1
; GENERAL INFORMATION:
; APPLICANT: Kleanthous, Harold
; APPLICANT: Al-Garawi, Amal
; APPLICANT: Miller, Charles
; APPLICANT: Tomb, Jean-Francois
; APPLICANT: Oomen, Raymond P.
; TITLE OF INVENTION: Identification of Polynucleotides
; TITLE OF INVENTION: Encoding No. US20020115078A1el Helicobacter Polypeptides in the
; TITLE OF INVENTION: Genome
; FILE REFERENCE: 06132/041002
; CURRENT APPLICATION NUMBER: US/09/881,752A
; CURRENT FILING DATE: 2001-06-15
; PRIOR APPLICATION NUMBER: US 08/833,457
; PRIOR FILING DATE: 1997-04-01
; NUMBER OF SEQ ID NOS: 370
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 280
; LENGTH: 751
; TYPE: PRT
; ORGANISM: Helicobacter pylori
US-09-881-752A-280

Query Match 4.7%; Score 110; DB 10; Length 751;
Best Local Similarity 16.8%; Pred. No. 0.24;
Matches 94; Conservative 76; Mismatches 162; Indels 226; Gaps 25;

QY 20 KNNLIDLSGYGAKVEYDGVNLDKNQPKLTSSANSKIRVTQONQII----- 67
Db 229 RDKNVLFP-----RVEYHNTIKR-KEDIK-----DNKVRAYDEKRNALLDTRRIKEITKC 276
QY 68 -----FNSVFLDFSV-----SFWRIPKPKND-----GIQYIHN-EYTIINCM 105
Db 277 ILRFNQTAKNKFNSILACSTKALKKYQAFKEKHDLKTAAPSYSANEEIDTLEDE 336
QY 106 KNSGWKISIRNR--IIWTLIDINGKTSVFFEXNIREDISYINRWFFVITNNLNA 163
Db 337 NNEACRLD-KSSRDFLEGAIDYNGM-----FGVSPDTSQKFSQYKDLQSKMKER 388
QY 164 KIYINGKLENTDIKIDIREVIANGELIFKLDGIDRTQFIW---MKYESIFNTELSOSN 219
Db 389 KI-----DLIMVYN---MFLTGDFATRLNTLWVDKKNLKYHGLIQAFSRNR 431
QY 220 IEERYK-----IQSYSEYKDKFWGNPLMYNKEY 247
Db 432 ILDSVKTHGNVCFRDLEQDLNDALMFGNKDAQSALLRKVEDYKGYTDN---NKEY 487
QY 248 Y-----MFNAGNKNSTYKL-----KDSVPVGEILT 272
Db 488 EGYBGLIKRLLTFEPLEKPIVSQKDFIKFKGLKLENILNSFENFKDDYIN---P 544
QY 273 RSKYNQNSKYNINVDLYIGKFIIRKNSQSINDDIV----- 310
Db 545 RFDQYQSKYLDYDAMRSEK-----GKDKEEINDDLIFEIELIKQVEYNIDYILNLTEE 599
QY 311 -----RKEDIY--YLDFFNLNQEWRVYTYKYFKKEEK 341
Db 600 FAKHGVEIQGVKTKIEPIINSIELRNKKDLIMDFDKYNKDQEVHAHFQDYIHOKRE- 658
QY 342 LFLAPISDSDELYNTIQIKEYDEQPTYSCOLLFKKDEESTDEIGLIGIHRFYESGIVFEE 401

Db 659 -----EEFQNLIEENRLNEEKAYS-----FMQHAFKGEISFSCT-----EFPKIIEE 701
QY 402 YADYFCISKWILKEVKRK 419
Db 702 KPSMEFGKNSRY-QEYKEK 718

Search completed: November 1, 2002, 08:24:23
Job time : 34 secs

GenCore version 5.1.3
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OM protein - protein search, using sw model

Run on: November 1, 2002, 07:20:38 ; Search time 291 Seconds
(without alignments)
974.854 Million cell updates/sec

Title: US-09-910-186A-8
Perfect score: 2350
Sequence: 1 MANKYNSILNIILNLYK.....YNLKLGNWQIFPKDEGWT 440

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 4569144 seqs, 644733110 residues

Total number of hits satisfying chosen parameters: 4569144

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum first 100%
Listing first 45 summaries

Database : Pending_Patents_AA_Main:*

- 1: /cgn2_6/ptodata/1/paa/PCTUS_COMB.pap.*
- 2: /cgn2_6/ptodata/1/paa/US06_COMB.pap.*
- 3: /cgn2_6/ptodata/1/paa/US07_COMB.pap.*
- 4: /cgn2_6/ptodata/1/paa/US08_COMB.pap.*
- 5: /cgn2_6/ptodata/1/paa/US081_COMB.pap.*
- 6: /cgn2_6/ptodata/1/paa/US082_COMB.pap.*
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- 8: /cgn2_6/ptodata/1/paa/US084_COMB.pap.*
- 9: /cgn2_6/ptodata/1/paa/US085_COMB.pap.*
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- 19: /cgn2_6/ptodata/1/paa/US095_COMB.pap.*
- 20: /cgn2_6/ptodata/1/paa/US096_COMB.pap.*
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- 22: /cgn2_6/ptodata/1/paa/US098_COMB.pap.*
- 23: /cgn2_6/ptodata/1/paa/US099_COMB.pap.*
- 24: /cgn2_6/ptodata/1/paa/US100_COMB.pap.*
- 25: /cgn2_6/ptodata/1/paa/US101_COMB.pap.*
- 26: /cgn2_6/ptodata/1/paa/US102_COMB.pap.*
- 27: /cgn2_6/ptodata/1/paa/US60_COMB.pap.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length DB	ID	Description
1	2350	100.0	440	20	US-09-611-419A-8
2	2350	100.0	440	23	US-09-910-186A-8
3	2340	99.6	472	1	PCT-US97-15394-46
4	2340	99.6	472	11	US-08-704-159-46
5	2340	99.6	472	26	US-10-271-012-46
6	2340	99.6	850	5	US-08-123-975A-2

7	2340	99.6	1070	22	US-09-831-050-4	Sequence 4, Appli
8	2340	99.6	1095	22	US-09-831-050-7	Sequence 7, Appli
9	2340	99.6	1291	1	PCT-US97-15394-42	Sequence 42, Appli
10	2340	99.6	1291	11	US-08-704-159-42	Sequence 42, Appli
11	2340	99.6	1291	26	US-10-271-012-42	Sequence 42, Appli
12	2337	99.4	439	5	US-08-123-975A-5	Sequence 5, Appli
13	2283.5	97.2	436	20	US-09-611-419A-40	Sequence 40, Appli
14	2227.5	94.8	843	20	US-09-611-419A-42	Sequence 42, Appli
15	2102	89.4	472	1	PCT-US97-15394-44	Sequence 44, Appli
16	2102	89.4	472	11	US-08-704-159-44	Sequence 44, Appli
17	2102	89.4	472	26	US-10-271-012-44	Sequence 44, Appli
18	2099	89.3	1291	1	PCT-US97-15394-40	Sequence 40, Appli
19	2099	89.3	1291	11	US-08-704-159-40	Sequence 40, Appli
20	2099	89.3	1291	19	US-09-547-188-4	Sequence 35147, A
21	2099	89.3	1291	21	US-09-791-537-35147	Sequence 4, Appli
22	2099	89.3	1291	26	US-10-205-516-4	Sequence 40, Appli
23	2099	89.3	1291	26	US-10-271-012-40	Sequence 40, Appli
24	2099	89.3	1301	26	US-10-205-516-18	Sequence 18, Appli
25	2097	89.2	441	21	US-09-791-537-49461	Sequence 49461, A
26	1667	70.9	1169	26	US-10-241-596-20	Sequence 20, Appli
27	1168.5	49.7	449	20	US-09-611-419A-18	Sequence 18, Appli
28	1168.5	49.7	449	23	US-09-910-186A-18	Sequence 79, Appli
29	1168.5	49.7	473	1	PCT-US97-15394-79	Sequence 79, Appli
30	1168.5	49.7	473	11	US-08-704-159-79	Sequence 79, Appli
31	1168.5	49.7	473	26	US-10-271-012-79	Sequence 77, Appli
32	1168.5	49.7	1297	1	PCT-US97-15394-77	Sequence 77, Appli
33	1168.5	49.7	1297	11	US-08-704-159-77	Sequence 77, Appli
34	1168.5	49.7	1297	19	US-09-547-188-14	Sequence 14, Appli
35	1168.5	49.7	1297	21	US-09-791-537-14255	Sequence 14255, A
36	1168.5	49.7	1297	21	US-09-791-537-152350	Sequence 152350, A
37	1168.5	49.7	1297	26	US-10-205-516-14	Sequence 14, Appli
38	1168.5	49.7	1297	26	US-10-271-012-77	Sequence 77, Appli
39	1168.5	49.7	1307	26	US-10-205-516-28	Sequence 28, Appli
40	831.5	35.4	434	20	US-09-611-419A-4	Sequence 4, Appli
41	831.5	35.4	434	23	US-09-910-186A-4	Sequence 4, Appli
42	831.5	35.4	435	20	US-09-611-419A-6	Sequence 6, Appli
43	831.5	35.4	435	23	US-09-910-186A-6	Sequence 6, Appli
44	831.5	35.4	437	20	US-09-611-419A-2	Sequence 2, Appli
45	831.5	35.4	437	23	US-09-910-186A-2	Sequence 2, Appli

ALIGNMENTS

RESULT 1
US-09-611-419A-8
; Sequence 8, Application US/09611419A
; GENERAL INFORMATION:
; APPLICANT: Smith, Leonard A.
; APPLICANT: Byrne, Michael P.
; APPLICANT: Middlebrook, John L.
; APPLICANT: Lapenotiere, Hugh
; APPLICANT: Clayton, Michael A.
; APPLICANT: Brown, Douglas R.
; TITLE OF INVENTION: RECOMBINANT VACCINE AGAINST BOTULINUM
; TITLE OF INVENTION: NEUROTOXIN
; FILE REFERENCE: A33626 067252.0105
; CURRENT APPLICATION NUMBER: US/09/611,419A
; CURRENT FILING DATE: 2000-07-06
; PRIOR APPLICATION NUMBER: PCT/US00/12890
; PRIOR FILING DATE: 2000-05-12
; PRIOR APPLICATION NUMBER: 60/133,865
; PRIOR FILING DATE: 1999-05-12
; PRIOR APPLICATION NUMBER: 60/133,866
; PRIOR FILING DATE: 1999-05-12
; PRIOR APPLICATION NUMBER: 60/133,867
; PRIOR FILING DATE: 1999-05-12
; PRIOR APPLICATION NUMBER: 60/133,868
; PRIOR FILING DATE: 1999-05-12
; PRIOR APPLICATION NUMBER: 60/133,869
; PRIOR FILING DATE: 1999-05-12
; PRIOR APPLICATION NUMBER: 60/146,192
; PRIOR FILING DATE: 1999-07-29

; NUMBER OF SEQ ID NOS: 42
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 440
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Encoded polypeptide of a synthetic construct based
; OTHER INFORMATION: on BoNTB Hc
US-09-611-419A-8

Query Match 100.0%; Score 2350; DB 20; Length 440;
Best Local Similarity 100.0%; Pred. No. 3e-206;
Matches 440; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MANKYSEILNLIILNRYKNDLIDLSYGAKVEYDGVDELNDKNQKFLTSSANSKIRV 60
DB 1 MANKYSEILNLIILNRYKNDLIDLSYGAKVEYDGVDELNDKNQKFLTSSANSKIRV 60
QY 61 TQNCIIFNSVFLDFSVFWIRIPKYKNDGIONYIHNEYTTINCMKNSGWKISIRGNRI 120
DB 61 TQNCIIFNSVFLDFSVFWIRIPKYKNDGIONYIHNEYTTINCMKNSGWKISIRGNRI 120
QY 121 IWTLDINGKTKSVFEYINREDISYINRWFFVITNNLNNAKIYINGKLESNTDIKDI 180
DB 121 IWTLDINGKTKSVFEYINREDISYINRWFFVITNNLNNAKIYINGKLESNTDIKDI 180
QY 181 REVIANGEIIFKLDGIDRTQFIWMKYFSIFNTELSQSNIEERYKIQSYSEYKDFWGNP 240
DB 181 REVIANGEIIFKLDGIDRTQFIWMKYFSIFNTELSQSNIEERYKIQSYSEYKDFWGNP 240
QY 241 LMNYKEYMFNAGKNKSYIKLKDPSVGEILTRSKYNQNSKYINRDLYIGKFTIRKKS 300
DB 241 LMNYKEYMFNAGKNKSYIKLKDPSVGEILTRSKYNQNSKYINRDLYIGKFTIRKKS 300
QY 301 NSQSINDDIVRKEDYIYLDFFNLNQEWRYTYKYFKKEBEKFLAPISDSDELYNTIOIK 360
DB 301 NSQSINDDIVRKEDYIYLDFFNLNQEWRYTYKYFKKEBEKFLAPISDSDELYNTIOIK 360
QY 361 EYDEQPTYSQCLLFKDEESTDEIGLIGHRFVESGIVFEYKDYFCISKWYLKVKRKP 420
DB 361 EYDEQPTYSQCLLFKDEESTDEIGLIGHRFVESGIVFEYKDYFCISKWYLKVKRKP 420
QY 421 YNLKGCNWQFIPKDEGWT 440
DB 421 YNLKGCNWQFIPKDEGWT 440

RESULT 2
US-09-910-186A-8
; Sequence 8, Application US/09910186A
; GENERAL INFORMATION:
; APPLICANT: U.S. Army Medical Research & Materiel Command
; TITLE OF INVENTION: RECOMBINANT VACCINE AGAINST BOTULINUM
; FILE REFERENCE: A33626-A 067252.0107
; CURRENT APPLICATION NUMBER: US/09/910,186A
; CURRENT FILING DATE: 2001-07-20
; PRIOR APPLICATION NUMBER: PCT/US00/12890
; PRIOR FILING DATE: 2000-05-12
; PRIOR APPLICATION NUMBER: 09/611,419
; PRIOR FILING DATE: 2000-07-06
; PRIOR APPLICATION NUMBER: 60/133,865
; PRIOR FILING DATE: 1999-05-12
; PRIOR APPLICATION NUMBER: 60/133,866
; PRIOR FILING DATE: 1999-05-12
; PRIOR APPLICATION NUMBER: 60/133,867
; PRIOR FILING DATE: 1999-05-12
; PRIOR APPLICATION NUMBER: 60/133,868
; PRIOR FILING DATE: 1999-05-12
; PRIOR APPLICATION NUMBER: 60/133,869
; PRIOR FILING DATE: 1999-05-12
; PRIOR APPLICATION NUMBER: 60/133,873

; PRIOR FILING DATE: 1999-05-12
; PRIOR APPLICATION NUMBER: 08/123,975
; PRIOR FILING DATE: 1993-09-21
; NUMBER OF SEQ ID NOS: 34
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 440
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct based on Clostridium botulinum
; OTHER INFORMATION: sequence
US-09-910-186A-8

Query Match 100.0%; Score 2350; DB 23; Length 440;
Best Local Similarity 100.0%; Pred. No. 3e-206;
Matches 440; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MANKYSEILNLIILNRYKNDLIDLSYGAKVEYDGVDELNDKNQKFLTSSANSKIRV 60
DB 1 MANKYSEILNLIILNRYKNDLIDLSYGAKVEYDGVDELNDKNQKFLTSSANSKIRV 60
QY 61 TQNCIIFNSVFLDFSVFWIRIPKYKNDGIONYIHNEYTTINCMKNSGWKISIRGNRI 120
DB 61 TQNCIIFNSVFLDFSVFWIRIPKYKNDGIONYIHNEYTTINCMKNSGWKISIRGNRI 120
QY 121 IWTLDINGKTKSVFEYINREDISYINRWFFVITNNLNNAKIYINGKLESNTDIKDI 180
DB 121 IWTLDINGKTKSVFEYINREDISYINRWFFVITNNLNNAKIYINGKLESNTDIKDI 180
QY 181 REVIANGEIIFKLDGIDRTQFIWMKYFSIFNTELSQSNIEERYKIQSYSEYKDFWGNP 240
DB 181 REVIANGEIIFKLDGIDRTQFIWMKYFSIFNTELSQSNIEERYKIQSYSEYKDFWGNP 240
QY 241 LMNYKEYMFNAGKNKSYIKLKDPSVGEILTRSKYNQNSKYINRDLYIGKFTIRKKS 300
DB 241 LMNYKEYMFNAGKNKSYIKLKDPSVGEILTRSKYNQNSKYINRDLYIGKFTIRKKS 300
QY 301 NSQSINDDIVRKEDYIYLDFFNLNQEWRYTYKYFKKEBEKFLAPISDSDELYNTIOIK 360
DB 301 NSQSINDDIVRKEDYIYLDFFNLNQEWRYTYKYFKKEBEKFLAPISDSDELYNTIOIK 360
QY 361 EYDEQPTYSQCLLFKDEESTDEIGLIGHRFVESGIVFEYKDYFCISKWYLKVKRKP 420
DB 361 EYDEQPTYSQCLLFKDEESTDEIGLIGHRFVESGIVFEYKDYFCISKWYLKVKRKP 420
QY 421 YNLKGCNWQFIPKDEGWT 440
DB 421 YNLKGCNWQFIPKDEGWT 440

RESULT 3
PCT-US97-15394-46
; Sequence 46, Application PC/TUS9715394
; GENERAL INFORMATION:
; APPLICANT: Williams, James A.
; APPLICANT: Thalley, Bruce S.
; TITLE OF INVENTION: Multivalent Vaccine For Clostridium
; TITLE OF INVENTION: Botulinum Neurotoxin
; NUMBER OF SEQUENCES: 82
; CORRESPONDENCE ADDRESS:
; ADDRESS: Medlen & Carroll
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:

```

; APPLICATION NUMBER: PCT/US97/15394
; FILING DATE:
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: OPHD-02304
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 46:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 472 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
PCT-US97-15394-46

```

```

Query Match          99.6%; Score 2340; DB 1; Length 472;
Best Local Similarity 99.5%; Pred. No. 2.8e-205;
Matches 438; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 MANKYSEILNNILNRYKDNLDLSGYGAKVEYDGVVLDNDKKNQKLTSSANSKIRV 60
DB 33 MFNKYSEILNNILNRYKDNLDLSGYGAKVEYDGVVLDNDKKNQKLTSSANSKIRV 92

QY 61 TQNONIIFNSVFLDVSFWIRPKYKNDGIQYIHNEYTIINCMKNSGWKISIRGNRI 120
DB 93 TQNONIIFNSVFLDVSFWIRPKYKNDGIQYIHNEYTIINCMKNSGWKISIRGNRI 152

QY 121 IWTLDINGTKTSVFFEYNIREDISEYINRWFFVTITNNLNNAKIYINGKLESNTDIKDI 180
DB 153 IWTLDINGTKTSVFFEYNIREDISEYINRWFFVTITNNLNNAKIYINGKLESNTDIKDI 212

QY 181 REVANGEIIFKLDGDDRTQFIWMKYFSIFNTELSQSNIEERYKIQSYSEYIKDFWGNP 240
DB 213 REVANGEIIFKLDGDDRTQFIWMKYFSIFNTELSQSNIEERYKIQSYSEYIKDFWGNP 272

QY 241 LMYNKEYMFNAGNKNYSYIKLKDSPVGEILTTSKYNQNSKYINRYDLVIGKFIIRRS 300
DB 273 LMYNKEYMFNAGNKNYSYIKLKDSPVGEILTTSKYNQNSKYINRYDLVIGKFIIRRS 332

QY 301 NSQSINDDIVRKEDIYLDFFNLNQERVVTYKYFKKEEKLFLAPISDSDELYNTIQIK 360
DB 333 NSQSINDDIVRKEDIYLDFFNLNQERVVTYKYFKKEEKLFLAPISDSDELYNTIQIK 392

QY 361 EYDEOPTYSCOLLFKKDEESTDEGLIGIHRFYESGIVFEYKDYFCISKWYLKEVKRKP 420
DB 393 EYDEOPTYSCOLLFKKDEESTDEGLIGIHRFYESGIVFEYKDYFCISKWYLKEVKRKP 452

QY 421 YNLKLGCNWQFIPKDEGWE 440
DB 453 YNLKLGCNWQFIPKDEGWE 472

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RESULT 4
US-08-704-159-46
; Sequence 46, Application US/08704159
; GENERAL INFORMATION:
; APPLICANT: Williams, James A.
; APPLICANT: Thalley, Bruce S.
; TITLE OF INVENTION: Multivalent Vaccine For Clostridium
; TITLE OF INVENTION: Botulinum Neurotoxin
; NUMBER OF SEQUENCES: 82
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk

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; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/704,159
; FILING DATE:
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: OPHD-02304
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 46:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 472 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-704-159-46

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Query Match          99.6%; Score 2340; DB 1; Length 472;
Best Local Similarity 99.5%; Pred. No. 2.8e-205;
Matches 438; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 MANKYSEILNNILNRYKDNLDLSGYGAKVEYDGVVLDNDKKNQKLTSSANSKIRV 60
DB 33 MFNKYSEILNNILNRYKDNLDLSGYGAKVEYDGVVLDNDKKNQKLTSSANSKIRV 92

QY 61 TQNONIIFNSVFLDVSFWIRPKYKNDGIQYIHNEYTIINCMKNSGWKISIRGNRI 120
DB 93 TQNONIIFNSVFLDVSFWIRPKYKNDGIQYIHNEYTIINCMKNSGWKISIRGNRI 152

QY 121 IWTLDINGTKTSVFFEYNIREDISEYINRWFFVTITNNLNNAKIYINGKLESNTDIKDI 180
DB 153 IWTLDINGTKTSVFFEYNIREDISEYINRWFFVTITNNLNNAKIYINGKLESNTDIKDI 212

QY 181 REVANGEIIFKLDGDDRTQFIWMKYFSIFNTELSQSNIEERYKIQSYSEYIKDFWGNP 240
DB 213 REVANGEIIFKLDGDDRTQFIWMKYFSIFNTELSQSNIEERYKIQSYSEYIKDFWGNP 272

QY 241 LMYNKEYMFNAGNKNYSYIKLKDSPVGEILTTSKYNQNSKYINRYDLVIGKFIIRRS 300
DB 273 LMYNKEYMFNAGNKNYSYIKLKDSPVGEILTTSKYNQNSKYINRYDLVIGKFIIRRS 332

QY 301 NSQSINDDIVRKEDIYLDFFNLNQERVVTYKYFKKEEKLFLAPISDSDELYNTIQIK 360
DB 333 NSQSINDDIVRKEDIYLDFFNLNQERVVTYKYFKKEEKLFLAPISDSDELYNTIQIK 392

QY 361 EYDEOPTYSCOLLFKKDEESTDEGLIGIHRFYESGIVFEYKDYFCISKWYLKEVKRKP 420
DB 393 EYDEOPTYSCOLLFKKDEESTDEGLIGIHRFYESGIVFEYKDYFCISKWYLKEVKRKP 452

QY 421 YNLKLGCNWQFIPKDEGWE 440
DB 453 YNLKLGCNWQFIPKDEGWE 472

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RESULT 5
US-10-271-012-46
; Sequence 46, Application US/10271012
; GENERAL INFORMATION:
; APPLICANT: Williams, James A.
; APPLICANT: Thalley, Bruce S.
; TITLE OF INVENTION: Multivalent Vaccine For Clostridium
; TITLE OF INVENTION: Botulinum Neurotoxin
; NUMBER OF SEQUENCES: 82
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California

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COUNTRY: United States of America
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/271,012
FILING DATE: 15-Oct-2002
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/704,159
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Ingolia, Diane E.
REGISTRATION NUMBER: 40,027
REFERENCE/DOCKET NUMBER: OPHD-02304
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 46:
SEQUENCE CHARACTERISTICS:
LENGTH: 472 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 46:
US-10-271-012-46

Query Match 99.6%; Score 2340; DB 26; Length 472;
Best Local Similarity 99.5%; Pred. No. 2.8e-205; Indels 0; Gaps 0;
Matches 438; Conservative 0; Mismatches 2;

QY 1 MANKYSEILNLIILRYKDNLDLSYGAKVEYDGVDELNDKNQFKLTSSANSKIRV 60
DB 33 MFKNYSEILNLIILRYKDNLDLSYGAKVEYDGVDELNDKNQFKLTSSANSKIRV 92
QY 61 TQNTQIFNSVFLDFSVPWIRPKYKNDGIONYIHNEYTTINCMKNNSGKWSIRGNRI 120
DB 93 TQNTQIFNSVFLDFSVPWIRPKYKNDGIONYIHNEYTTINCMKNNSGKWSIRGNRI 152
QY 121 IWLIDINGKTSVFVEYNIREDISEYINRWFFVITNNLNNAKIYINGKLESNTDIKI 180
DB 153 IWLIDINGKTSVFVEYNIREDISEYINRWFFVITNNLNNAKIYINGKLESNTDIKI 212
QY 181 REVIANGEIIFKLDGIDRTQFIWMKYFSIFNTELSQSNIEERYKIQSYSEYLDKDFWGNP 240
DB 213 REVIANGEIIFKLDGIDRTQFIWMKYFSIFNTELSQSNIEERYKIQSYSEYLDKDFWGNP 272
QY 241 LMYNKEYMFNAGNKNYSYIKLKKDSPVGEILTRSKYNQNSKYINRYDLIYIGKFTIRRS 300
DB 273 LMYNKEYMFNAGNKNYSYIKLKKDSPVGEILTRSKYNQNSKYINRYDLIYIGKFTIRRS 332
QY 301 NSQSINDDIVRKEDIYILDFNNOEWRYVYTKYKPKKEEKLFLAPISDSDELYNTIOIK 360
DB 333 NSQSINDDIVRKEDIYILDFNNOEWRYVYTKYKPKKEEKLFLAPISDSDELYNTIOIK 392
QY 361 EYDEQPTYSCQLLFKKDEESTDEIGLIGHREYSGIVFEEYKDYFCISKWYLVKVRKRP 420
DB 393 EYDEQPTYSCQLLFKKDEESTDEIGLIGHREYSGIVFEEYKDYFCISKWYLVKVRKRP 452
QY 421 YNLKGCNWOQIFPKDEGWE 440
DB 453 YNLKGCNWOQIFPKDEGWE 472

RESULT 6
US-08-123-975A-2
; Sequence 2, Application US/08123975A
; GENERAL INFORMATION:
; APPLICANT: Middlebrook, John L
; APPLICANT: Lapenotiere, Hugh F

APPLICANT: Clayton, Michael A
APPLICANT: Brown, Douglas R
TITLE OF INVENTION: POLYPEPTIDE FUSION PRODUCT AS VACCINE
TITLE OF INVENTION: AGAINST C. BOTULINUM
NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
ADDRESSEE: John F. Moran
STREET: Off. of Command Jdg. Adv.
CITY: Fredrick
STATE: Maryland
COUNTRY: USA
ZIP: 21702-5012
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/123,975A
FILING DATE: 21-SEP-1993
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Hendricks, Glenna
REGISTRATION NUMBER: 32,535
REFERENCE/DOCKET NUMBER: mid.1
TELECOMMUNICATION INFORMATION:
TELEPHONE: (301) 619-2065
TELEFAX: (301) 619-7714
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 850 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
HYPOTHETICAL: NO
FRAGMENT TYPE: N-terminal
ORIGINAL SOURCE:
ORGANISM: heavy chain of serotyp B botulinum toxin
US-08-123-975A-2

Query Match 99.6%; Score 2340; DB 5; Length 850;
Best Local Similarity 99.5%; Pred. No. 6.6e-205; Indels 0; Gaps 0;
Matches 438; Conservative 0; Mismatches 2;

QY 1 MANKYSEILNLIILRYKDNLDLSYGAKVEYDGVDELNDKNQFKLTSSANSKIRV 60
DB 411 MFKNYSEILNLIILRYKDNLDLSYGAKVEYDGVDELNDKNQFKLTSSANSKIRV 470
QY 61 TQNTQIFNSVFLDFSVPWIRPKYKNDGIONYIHNEYTTINCMKNNSGKWSIRGNRI 120
DB 471 TQNTQIFNSVFLDFSVPWIRPKYKNDGIONYIHNEYTTINCMKNNSGKWSIRGNRI 530
QY 121 IWLIDINGKTSVFVEYNIREDISEYINRWFFVITNNLNNAKIYINGKLESNTDIKI 180
DB 531 IWLIDINGKTSVFVEYNIREDISEYINRWFFVITNNLNNAKIYINGKLESNTDIKI 590
QY 181 REVIANGEIIFKLDGIDRTQFIWMKYFSIFNTELSQSNIEERYKIQSYSEYLDKDFWGNP 240
DB 591 REVIANGEIIFKLDGIDRTQFIWMKYFSIFNTELSQSNIEERYKIQSYSEYLDKDFWGNP 650
QY 241 LMYNKEYMFNAGNKNYSYIKLKKDSPVGEILTRSKYNQNSKYINRYDLIYIGKFTIRRS 300
DB 651 LMYNKEYMFNAGNKNYSYIKLKKDSPVGEILTRSKYNQNSKYINRYDLIYIGKFTIRRS 710
QY 301 NSQSINDDIVRKEDIYILDFNNOEWRYVYTKYKPKKEEKLFLAPISDSDELYNTIOIK 360
DB 711 NSQSINDDIVRKEDIYILDFNNOEWRYVYTKYKPKKEEKLFLAPISDSDELYNTIOIK 770
QY 361 EYDEQPTYSCQLLFKKDEESTDEIGLIGHREYSGIVFEEYKDYFCISKWYLVKVRKRP 420
DB 771 EYDEQPTYSCQLLFKKDEESTDEIGLIGHREYSGIVFEEYKDYFCISKWYLVKVRKRP 830

QY 421 YNLKLCNWFIPKDEGTE 440
 Db 831 YNLKLCNWFIPKDEGTE 850

RESULT 7

US-09-831-050-4
 ; Sequence 4, Application US/09831050
 ; GENERAL INFORMATION:
 ; APPLICANT: SHONE, Clifford Charles
 ; APPLICANT: SUTTON, John Mark
 ; APPLICANT: HALLIS, Bassam
 ; APPLICANT: SILMAN, Nigel
 ; TITLE OF INVENTION: Delivery of Superoxide Dismutase to Neuronal Cells
 ; FILE REFERENCE: 1581.0800000
 ; CURRENT APPLICATION NUMBER: US/09/831,050
 ; CURRENT FILING DATE: 1999-11-05
 ; PRIOR APPLICATION NUMBER: PCT/GB99/03699
 ; PRIOR FILING DATE: 1998-11-05
 ; NUMBER OF SEQ ID NOS: 11
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 4
 ; LENGTH: 1070
 ; TYPE: PRT
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Description of Artificial Sequence:construct
 US-09-831-050-4

Query Match 99.6%; Score 2340; DB 22; Length 1070;
 Best Local Similarity 99.5%; Pred. No. 9.3e-205;
 Matches 438; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1 MANKYSEILNLIILRYKDNLDLSCYGAKVEYDGVDELNDKNQKLTSSANSKIRV 60
 Db 631 MFNKYSEILNLIILRYKDNLDLSCYGAKVEYDGVDELNDKNQKLTSSANSKIRV 690
 QY 61 TONQNIIFNSVFLDFSVPWIRIPKYKNDGIONYIHNEYTIINCMMKNSGKISIRGNRI 120
 Db 691 TONQNIIFNSVFLDFSVPWIRIPKYKNDGIONYIHNEYTIINCMMKNSGKISIRGNRI 750
 QY 121 IWTLDINGKTSVFPEYNTREDISEYINRWFFVTITNNLNNAKIYINGKLESNTDIKDI 180
 Db 751 IWTLDINGKTSVFPEYNTREDISEYINRWFFVTITNNLNNAKIYINGKLESNTDIKDI 810
 QY 181 REVIANGEIIFKLDGIDRTQFIWMKYFSIFNTELSQSNIEERYKIQSYSEYKDFWGNP 240
 Db 811 REVIANGEIIFKLDGIDRTQFIWMKYFSIFNTELSQSNIEERYKIQSYSEYKDFWGNP 870
 QY 241 LMYNKEYMFNAGNKNYSIKLKKDSPVGEILTRSKYNQNSKYINVRDLYIGKEFTIRKS 300
 Db 871 LMYNKEYMFNAGNKNYSIKLKKDSPVGEILTRSKYNQNSKYINVRDLYIGKEFTIRKS 930
 QY 301 NSQSIINDIVRKEDYIYLDFFNLNQEWRYTYKYFKKEEKLFLAPISDSDELYNTIQIK 360
 Db 931 NSQSIINDIVRKEDYIYLDFFNLNQEWRYTYKYFKKEEKLFLAPISDSDELYNTIQIK 990
 QY 361 EYDEQPTYSQQLFKKDEESTDEIGLIGHRFYESGIVFEYKDYFCISKWYLKVKRKP 420
 Db 991 EYDEQPTYSQQLFKKDEESTDEIGLIGHRFYESGIVFEYKDYFCISKWYLKVKRKP 1050
 QY 421 YNLKLCNWFIPKDEGTE 440
 Db 1051 YNLKLCNWFIPKDEGTE 1070

RESULT 8

US-09-831-050-7
 ; Sequence 7, Application US/09831050
 ; GENERAL INFORMATION:
 ; APPLICANT: SHONE, Clifford Charles
 ; APPLICANT: SUTTON, John Mark
 ; APPLICANT: HALLIS, Bassam

APPLICANT: SILMAN, Nigel
 ; TITLE OF INVENTION: Delivery of Superoxide Dismutase to Neuronal Cells
 ; FILE REFERENCE: 1581.0800000
 ; CURRENT APPLICATION NUMBER: US/09/831,050
 ; CURRENT FILING DATE: 1999-11-05
 ; PRIOR APPLICATION NUMBER: PCT/GB99/03699
 ; PRIOR FILING DATE: 1998-11-05
 ; NUMBER OF SEQ ID NOS: 11
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 7
 ; LENGTH: 1095
 ; TYPE: PRT
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Description of Artificial Sequence:construct
 US-09-831-050-7
 Query Match 99.6%; Score 2340; DB 22; Length 1095;
 Best Local Similarity 99.5%; Pred. No. 9.6e-205;
 Matches 438; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1 MANKYSEILNLIILRYKDNLDLSCYGAKVEYDGVDELNDKNQKLTSSANSKIRV 60
 Db 656 MFNKYSEILNLIILRYKDNLDLSCYGAKVEYDGVDELNDKNQKLTSSANSKIRV 715
 QY 61 TONQNIIFNSVFLDFSVPWIRIPKYKNDGIONYIHNEYTIINCMMKNSGKISIRGNRI 120
 Db 716 TONQNIIFNSVFLDFSVPWIRIPKYKNDGIONYIHNEYTIINCMMKNSGKISIRGNRI 775
 QY 121 IWTLDINGKTSVFPEYNTREDISEYINRWFFVTITNNLNNAKIYINGKLESNTDIKDI 180
 Db 776 IWTLDINGKTSVFPEYNTREDISEYINRWFFVTITNNLNNAKIYINGKLESNTDIKDI 835
 QY 181 REVIANGEIIFKLDGIDRTQFIWMKYFSIFNTELSQSNIEERYKIQSYSEYKDFWGNP 240
 Db 836 REVIANGEIIFKLDGIDRTQFIWMKYFSIFNTELSQSNIEERYKIQSYSEYKDFWGNP 895
 QY 241 LMYNKEYMFNAGNKNYSIKLKKDSPVGEILTRSKYNQNSKYINVRDLYIGKEFTIRKS 300
 Db 896 LMYNKEYMFNAGNKNYSIKLKKDSPVGEILTRSKYNQNSKYINVRDLYIGKEFTIRKS 955
 QY 301 NSQSIINDIVRKEDYIYLDFFNLNQEWRYTYKYFKKEEKLFLAPISDSDELYNTIQIK 360
 Db 956 NSQSIINDIVRKEDYIYLDFFNLNQEWRYTYKYFKKEEKLFLAPISDSDELYNTIQIK 1015
 QY 361 EYDEQPTYSQQLFKKDEESTDEIGLIGHRFYESGIVFEYKDYFCISKWYLKVKRKP 420
 Db 1016 EYDEQPTYSQQLFKKDEESTDEIGLIGHRFYESGIVFEYKDYFCISKWYLKVKRKP 1075
 QY 421 YNLKLCNWFIPKDEGTE 440
 Db 1076 YNLKLCNWFIPKDEGTE 1095
 RESULT 9
 PCT-US97-15394-42
 ; Sequence 42, Application PC/TUS9715394
 ; GENERAL INFORMATION:
 ; APPLICANT: Williams, James A.
 ; APPLICANT: Thalley, Bruce S.
 ; TITLE OF INVENTION: Multivalent Vaccine For Clostridium
 ; TITLE OF INVENTION: Botulinum Neurotoxin
 ; NUMBER OF SEQUENCES: 82
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Medlen & Carroll
 ; STREET: 220 Montgomery Street, Suite 2200
 ; CITY: San Francisco
 ; STATE: California
 ; COUNTRY: United States of America
 ; ZIP: 94104
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible


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; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US97/15394
; FILING DATE:
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: OPND-02304
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 42:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1291 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; PCT-US97-15394-42

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Query Match 99.6%; Score 2340; DB 1; Length 1291;
Best Local Similarity 99.5%; Pred. No. 1.2e-204;
Matches 438; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

QY 1 MANKYSEILNLIILNRYKDNLDLSCYGAKVEYDGVDELNDKNQKLTSSANSKIRV 60
DB 852 MFNKYSEILNLIILNRYKDNLDLSCYGAKVEYDGVDELNDKNQKLTSSANSKIRV 911
QY 61 TONQNIIFNSVFLDFSFWIRPKYKNDGIONYIHNEYTIINCMMKNSGWKISIRGNRI 120
DB 912 TONQNIIFNSVFLDFSFWIRPKYKNDGIONYIHNEYTIINCMMKNSGWKISIRGNRI 971
QY 121 IWTLDINGKTKSVFFEYNTREDISEYINRWFFVITNNLNNAKIYINGKLESNTDIKDI 180
DB 972 IWTLDINGKTKSVFFEYNTREDISEYINRWFFVITNNLNNAKIYINGKLESNTDIKDI 1031
QY 181 REVIANGEIIFKLDGIDRTQFTWKKYFISFNTLSQSIIEERYKIQSYSEYKDFWGNP 240
DB 1032 REVIANGEIIFKLDGIDRTQFTWKKYFISFNTLSQSIIEERYKIQSYSEYKDFWGNP 1091
QY 241 LMYNKEYMNFAGNKNKSYIKLKKDSPVGEILTRSKYNQNSKYNINRDLYIGKFTIRKRS 300
DB 1092 LMYNKEYMNFAGNKNKSYIKLKKDSPVGEILTRSKYNQNSKYNINRDLYIGKFTIRKRS 1151
QY 301 NSQSINDDIYRKEDIYLDFFNLNQEWRYTYKYFKKEEKLFLAPISDSDELYNTIOIK 360
DB 1152 NSQSINDDIYRKEDIYLDFFNLNQEWRYTYKYFKKEEKLFLAPISDSDELYNTIOIK 1211
QY 361 EYDEQPTYSCQLLFKKDESTDIGLIGHRFYVESGIVFEEYKDYFCISKWYLKEVKRRP 420
DB 1212 EYDEQPTYSCQLLFKKDESTDIGLIGHRFYVESGIVFEEYKDYFCISKWYLKEVKRRP 1271
QY 421 YNLKLCNWFQIFPKDEGWE 440
DB 1272 YNLKLCNWFQIFPKDEGWE 1291

```

```

RESULT 10
US-08-704-159-42
; Sequence 42, Application US/08704159
; GENERAL INFORMATION:
; APPLICANT: Williams, James A.
; APPLICANT: Thalley, Bruce S.
; TITLE OF INVENTION: Multivalent Vaccine For Clostridium
; TITLE OF INVENTION: Botulinum Neurotoxin
; NUMBER OF SEQUENCES: 82
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States of America

```

```

; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/704,159
; FILING DATE:
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: OPND-02304
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 42:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1291 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-704-159-42

```

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Query Match 99.6%; Score 2340; DB 11; Length 1291;
Best Local Similarity 99.5%; Pred. No. 1.2e-204;
Matches 438; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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QY 1 MANKYSEILNLIILNRYKDNLDLSCYGAKVEYDGVDELNDKNQKLTSSANSKIRV 60
DB 852 MFNKYSEILNLIILNRYKDNLDLSCYGAKVEYDGVDELNDKNQKLTSSANSKIRV 911
QY 61 TONQNIIFNSVFLDFSFWIRPKYKNDGIONYIHNEYTIINCMMKNSGWKISIRGNRI 120
DB 912 TONQNIIFNSVFLDFSFWIRPKYKNDGIONYIHNEYTIINCMMKNSGWKISIRGNRI 971
QY 121 IWTLDINGKTKSVFFEYNTREDISEYINRWFFVITNNLNNAKIYINGKLESNTDIKDI 180
DB 972 IWTLDINGKTKSVFFEYNTREDISEYINRWFFVITNNLNNAKIYINGKLESNTDIKDI 1031
QY 181 REVIANGEIIFKLDGIDRTQFTWKKYFISFNTLSQSIIEERYKIQSYSEYKDFWGNP 240
DB 1032 REVIANGEIIFKLDGIDRTQFTWKKYFISFNTLSQSIIEERYKIQSYSEYKDFWGNP 1091
QY 241 LMYNKEYMNFAGNKNKSYIKLKKDSPVGEILTRSKYNQNSKYNINRDLYIGKFTIRKRS 300
DB 1092 LMYNKEYMNFAGNKNKSYIKLKKDSPVGEILTRSKYNQNSKYNINRDLYIGKFTIRKRS 1151
QY 301 NSQSINDDIYRKEDIYLDFFNLNQEWRYTYKYFKKEEKLFLAPISDSDELYNTIOIK 360
DB 1152 NSQSINDDIYRKEDIYLDFFNLNQEWRYTYKYFKKEEKLFLAPISDSDELYNTIOIK 1211
QY 361 EYDEQPTYSCQLLFKKDESTDIGLIGHRFYVESGIVFEEYKDYFCISKWYLKEVKRRP 420
DB 1212 EYDEQPTYSCQLLFKKDESTDIGLIGHRFYVESGIVFEEYKDYFCISKWYLKEVKRRP 1271
QY 421 YNLKLCNWFQIFPKDEGWE 440
DB 1272 YNLKLCNWFQIFPKDEGWE 1291

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```

RESULT 11
US-10-271-012-42
; Sequence 42, Application US/10271012
; GENERAL INFORMATION:
; APPLICANT: Williams, James A.
; APPLICANT: Thalley, Bruce S.
; TITLE OF INVENTION: Multivalent Vaccine For Clostridium
; TITLE OF INVENTION: Botulinum Neurotoxin
; NUMBER OF SEQUENCES: 82
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States of America

```

```
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States of America
; ZIP: 94104
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/271,012
; FILING DATE: 15-Oct-2002
; CLASSIFICATION: <Unknown>
;
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/704,159
; FILING DATE: <unknown>
;
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: OPHD-02304
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
;
; INFORMATION FOR SEQ ID NO: 42:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1291 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 42:
US-10-271-012-42

Query Match          99.6%; Score 2340; DB 26; Length 1291;
Best Local Similarity 99.5%; Pred. No. 1.2e-204;
Matches 438; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 MANKYSEILNIIILRYKDNLDLSGYGAKVEYDGVDELNDKNQFKLTSSANSKIRV 60
Db 852 MFNKYSEILNIIILRYKDNLDLSGYGAKVEYDGVDELNDKNQFKLTSSANSKIRV 911
Qy 61 TQNKIIIFNSVFLDFSFWIRPKYKNDGIQNYIHNEYTIINCKMKNNGWKISIRGNRI 120
Db 912 TQNKIIIFNSVFLDFSFWIRPKYKNDGIQNYIHNEYTIINCKMKNNGWKISIRGNRI 971
Qy 121 IWTLDINGTKTSVFFPYNREDISEYINRWFFVTITNNLNNAKIYINGKLESNTDIDKI 180
Db 972 IWTLDINGTKTSVFFPYNREDISEYINRWFFVTITNNLNNAKIYINGKLESNTDIDKI 1031
Qy 181 REVIANGEIIFKLDGIDRTQFIWMKYFSIFNTELSQSIIEERYKIQSYSEYLDKDFWGNP 240
Db 1032 REVIANGEIIFKLDGIDRTQFIWMKYFSIFNTELSQSIIEERYKIQSYSEYLDKDFWGNP 1091
Qy 241 LMYNKEYMFNAGNKNYSYIKLKDSPVGEILTTSKYNQNSKIYINRDLYIGKEFIIRKKS 300
Db 1092 LMYNKEYMFNAGNKNYSYIKLKDSPVGEILTTSKYNQNSKIYINRDLYIGKEFIIRKKS 1151
Qy 301 NSQINDDIVRKEDYIYLDFFNLQENRWVYTYKFKKEEKLFLAPISDSDELYNTIQIK 360
Db 1152 NSQINDDIVRKEDYIYLDFFNLQENRWVYTYKFKKEEKLFLAPISDSDELYNTIQIK 1211
Qy 361 EYDEQPTYSQCLLFKKDEESTDEIGLIGHRFYSGIVFEYKDYFCISKWYLKVKRRP 420
Db 1212 EYDEQPTYSQCLLFKKDEESTDEIGLIGHRFYSGIVFEYKDYFCISKWYLKVKRRP 1271
Qy 421 YNLKLGCMWQIPKDEGWTG 440
Db 1272 YNLKLGCMWQIPKDEGWTG 1291

RESULT 12
US-08-123-975A-5
; Sequence 5, Application US/08123975A
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```
; GENERAL INFORMATION:
; APPLICANT: Middlebrook, John L
; APPLICANT: Lapenotiere, Hugh F
; APPLICANT: Clayton, Michael A
; APPLICANT: Brown, Douglas R
; TITLE OF INVENTION: POLYPEPTIDE FUSION PRODUCT AS VACCINE
; TITLE OF INVENTION: AGAINST C. BOTULINUM
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: John F. Moran
; STREET: Off. of Command Jdg. Adv.
; CITY: Fredrick
; STATE: Maryland
; COUNTRY: USA
; ZIP: 21702-5012
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/123,975A
; FILING DATE: 21-Sep-1993
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Hendricks, Glenna
; REGISTRATION NUMBER: 32,535
; REFERENCE/DOCKET NUMBER: mid.1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (301) 619-2065
; TELEFAX: (301) 619-7714
;
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 439 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; FRAGMENT TYPE: N-terminal
; ORIGINAL SOURCE:
; ORGANISM: Clostridium botulinum toxin
;
; US-08-123-975A-5
;
Query Match          99.4%; Score 2337; DB 5; Length 439;
Best Local Similarity 99.8%; Pred. No. 4.7e-205;
Matches 437; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 3 NKYNSEILNIIILRYKDNLDLSGYGAKVEYDGVDELNDKNQFKLTSSANSKIRVTQ 62
Db 2 NKYNSEILNIIILRYKDNLDLSGYGAKVEYDGVDELNDKNQFKLTSSANSKIRVTQ 61
Qy 63 NQNTIFNSVFLDFSFWIRPKYKNDGIQNYIHNEYTIINCKMKNNGWKISIRGNRI 122
Db 62 NQNTIFNSVFLDFSFWIRPKYKNDGIQNYIHNEYTIINCKMKNNGWKISIRGNRI 121
Qy 123 TLIDINGTKTSVFFPYNREDISEYINRWFFVTITNNLNNAKIYINGKLESNTDIDIRE 182
Db 122 TLIDINGTKTSVFFPYNREDISEYINRWFFVTITNNLNNAKIYINGKLESNTDIDIRE 181
Qy 183 VIANGEIIFKLDGIDRTQFIWMKYFSIFNTELSQSIIEERYKIQSYSEYLDKDFWGNPLM 242
Db 182 VIANGEIIFKLDGIDRTQFIWMKYFSIFNTELSQSIIEERYKIQSYSEYLDKDFWGNPLM 241
Qy 243 YNKEYMFNAGNKNYSYIKLKDSPVGEILTTSKYNQNSKIYINRDLYIGKEFIIRKKS 302
Db 242 YNKEYMFNAGNKNYSYIKLKDSPVGEILTTSKYNQNSKIYINRDLYIGKEFIIRKKS 301
Qy 303 QSINDDIVRKEDYIYLDFFNLQENRWVYTYKFKKEEKLFLAPISDSDELYNTIQIK 362
Db 302 QSINDDIVRKEDYIYLDFFNLQENRWVYTYKFKKEEKLFLAPISDSDELYNTIQIK 361
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QY 363 DEOPTYSCOLLFKKDEESTDEIGLIHRFYESGIVFEYKDYFCISKWYLKEVKKRPYN 422
 Db 362 DEOPTYSCOLLFKKDEESTDEIGLIHRFYESGIVFEYKDYFCISKWYLKEVKKRPYN 421
 QY 423 LKLGCNWQFIPKDEGWTE 440
 Db 422 LKLGCNWQFIPKDEGWTE 439

RESULT 13
 US-09-611-419A-40
 ; Sequence 40, Application US/09611419A
 ; GENERAL INFORMATION:
 ; APPLICANT: Smith, Leonard A.
 ; APPLICANT: Byrne, Michael P.
 ; APPLICANT: Middlebrook, John L.
 ; APPLICANT: Lapenotiere, Hugh
 ; APPLICANT: Clayton, Michael A.
 ; APPLICANT: Brown, Douglas R.
 ; TITLE OF INVENTION: RECOMBINANT VACCINE AGAINST BOTULINUM
 ; FILE REFERENCE: A33626 067252.0105
 ; CURRENT APPLICATION NUMBER: US/09/611,419A
 ; CURRENT FILING DATE: 2000-07-06
 ; PRIOR APPLICATION NUMBER: PCT/US00/12890
 ; PRIOR FILING DATE: 2000-05-12
 ; PRIOR APPLICATION NUMBER: 60/133,865
 ; PRIOR FILING DATE: 1999-05-12
 ; PRIOR APPLICATION NUMBER: 60/133,866
 ; PRIOR FILING DATE: 1999-05-12
 ; PRIOR APPLICATION NUMBER: 60/133,867
 ; PRIOR FILING DATE: 1999-05-12
 ; PRIOR APPLICATION NUMBER: 60/133,868
 ; PRIOR FILING DATE: 1999-05-12
 ; PRIOR APPLICATION NUMBER: 60/133,869
 ; PRIOR FILING DATE: 1999-05-12
 ; PRIOR APPLICATION NUMBER: 60/146,192
 ; PRIOR FILING DATE: 1999-07-29
 ; NUMBER OF SEQ ID NOS: 42
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 40
 ; LENGTH: 436
 ; TYPE: PRT
 ; ORGANISM: Clostridium botulinum

US-09-611-419A-40
 Query Match 97.2%; Score 2283.5; DB 20; Length 436;
 Best Local Similarity 99.1%; Pred. No. 3.8e-200;
 Matches 434; Conservative 0; Mismatches 1; Indels 3; Gaps 3;
 QY 3 NKYNSEILNNILNRYKDNLDLSCYGAKEVYDGVDELNDKNQFKLTSSANSKIRVTQ 62
 Db 2 NKYNSEILNNILNRYKDNLDLSCYGAKEVYDGVDELNDKNQFKLTSSANSKIRVTQ 61
 QY 63 NQNTIFNSVFLDSVSWIRIPKYKNDGQNYIHNEYTIINCMKNNSGWKISIRGNRIW 122
 Db 62 NQNTIFNSVFLDSVSWIRIPKYKNDGQNYIHNEYTIINCMKNNSGWKISIRGNRIW 120
 QY 123 TLIDINGKTSVFEYINRDISEYINRWFVTITNNLNAKIYINGKLESNTDIDKDI 182
 Db 121 TLIDINGKTSVFEYINRDISEYINRWFVTITNNLNAKIYINGKLESNTDIDKDI 180
 QY 183 VIANGEIIFKLDGIDRTQFTWMKYFSIFNTELSQSNIEBRYKIQSYSEYKDFWGNPLM 242
 Db 181 VIANGEIIFKLDGIDRTQFTWMKYFSIFNTELSQSNIEBRYKIQSYSEYKDFWGNPLM 240
 QY 243 YNKEYYMFNAGNKNYSYIKLKADSPVGEILTRSKYNQNSKYINRDLYIGKEFTIRKKS 302
 Db 241 YNKEYYMFNAGNKNYSYIKLKADSPVGEILTRSKYNQNSKYINRDLYIGKEFTIRKKS 300
 QY 303 QSINDDIVRKEDYIYLDFFNLQEWRYTYTKYFKKEEKLFLAPISDSDELYNTIQIKEY 362
 Db 301 QSINDDIVRKEDYIYLDFFNLQEWRYTYTKYFKKEEKLFLAPISDSDELYNTIQIKEY 358

QY 363 DEOPTYSCOLLFKKDEESTDEIGLIHRFYESGIVFEYKDYFCISKWYLKEVKKRPYN 422
 Db 359 DEOPTYSCOLLFKKDEESTDEIGLIHRFYESGIVFEYKDYFCISKWYLKEVKKRPYN 418
 QY 423 LKLGCNWQFIPKDEGWTE 440
 Db 419 LKLGCNWQFIPKDEGWTE 436

RESULT 14
 US-09-611-419A-42
 ; Sequence 42, Application US/09611419A
 ; GENERAL INFORMATION:
 ; APPLICANT: Smith, Leonard A.
 ; APPLICANT: Byrne, Michael P.
 ; APPLICANT: Middlebrook, John L.
 ; APPLICANT: Lapenotiere, Hugh
 ; APPLICANT: Clayton, Michael A.
 ; APPLICANT: Brown, Douglas R.
 ; TITLE OF INVENTION: RECOMBINANT VACCINE AGAINST BOTULINUM
 ; FILE REFERENCE: A33626 067252.0105
 ; CURRENT APPLICATION NUMBER: US/09/611,419A
 ; CURRENT FILING DATE: 2000-07-06
 ; PRIOR APPLICATION NUMBER: PCT/US00/12890
 ; PRIOR FILING DATE: 2000-05-12
 ; PRIOR APPLICATION NUMBER: 60/133,865
 ; PRIOR FILING DATE: 1999-05-12
 ; PRIOR APPLICATION NUMBER: 60/133,866
 ; PRIOR FILING DATE: 1999-05-12
 ; PRIOR APPLICATION NUMBER: 60/133,867
 ; PRIOR FILING DATE: 1999-05-12
 ; PRIOR APPLICATION NUMBER: 60/133,868
 ; PRIOR FILING DATE: 1999-05-12
 ; PRIOR APPLICATION NUMBER: 60/133,869
 ; PRIOR FILING DATE: 1999-05-12
 ; PRIOR APPLICATION NUMBER: 60/146,192
 ; PRIOR FILING DATE: 1999-07-29
 ; NUMBER OF SEQ ID NOS: 42
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 42
 ; LENGTH: 843
 ; TYPE: PRT
 ; ORGANISM: Clostridium botulinum

US-09-611-419A-42
 Query Match 94.8%; Score 2227.5; DB 20; Length 843;
 Best Local Similarity 98.0%; Pred. No. 1.4e-194;
 Matches 431; Conservative 0; Mismatches 2; Indels 7; Gaps 7;
 QY 1 MANKYSEILNNILNRYKDNLDLSCYGAKEVYDGVDELNDKNQFKLTSSANSKIRV 60
 Db 411 MFKNYSEILNNILNRYKDNLDLSCYGAKEVYDGVDELNDKNQFKLTSSANSKIR- 469
 QY 61 TQNTIFNSVFLDSVSWIRIPKYKNDGQNYIHNEYTIINCMKNNSGWKISIRGNRI 120
 Db 470 TQNTIFNSVFLDSVSWIRIPKYKNDGQNYIHNEYTIINCMKNNSGWKISIRG-RI 528
 QY 121 IWLIDINGKTSVFEYINRDISEYINRWFVTITNNLNAKIYINGKLESNTDIDKDI 180
 Db 529 IWLIDINGKTSVFEYINRDISEYINRWFVTITNNLNAKIYINGKLESNTDIDKDI 588
 QY 181 REVJANGEIIFKLDGIDRTQFTWMKYFSIFNTELSQSNIEBRYKIQSYSEYKDFWGNP 240
 Db 589 REVJANGEIIFKLDGIDRTQFTWMKYFSIFNTELSQSNIEBRYKIQSYSEYKDFWGNP 648
 QY 241 LMNYKEYYMFNAGNKNYSYIKLKADSPVGEILTRSKYNQNSKYINRDLYIGKEFTIRKKS 300
 Db 649 LMNYKEYYMFNAGNKNYSYIKLKADSPVGEILTRSKYNQNSKYINRDLYIGKEFTIRKKS 708
 QY 301 NSQSINDDIVRKEDYIYLDFFNLQEWRYTYTKYFKKEEKLFLAPISDSDELYNTIQIK 360

Db 709 NSQSINDDIVRKEDIYLDFFNQLQWRVYTYKFKKKEE-LFLAPISDSDEFYNTIOIK 767
QY 361 EYDEQPTYSQCLLFKKDESTDIGLIGHREYFESGIYFEEKYDYFCISKWYLKEVRKRP 420
Db 768 EYDEQPTYSQCLLFKKDESTDIGLIGHREYFESGIYFEE-KD-FCIS-WYL-EVRKRP 823
QY 421 YNLKLGCNWQFIPKDEGWTE 440
Db 824 YNLKLGCNWQFIPKDEGWTE 843

RESULT 15
PCT-US97-15394-44
: Sequence 44. Application PC/TUS9715394
: GENERAL INFORMATION:
: APPLICANT: Williams, James A.
: APPLICANT: Thalley, Bruce S.
: TITLE OF INVENTION: Multivalent Vaccine For Clostridium
: TITLE OF INVENTION: Botulinum Neurotoxin
: NUMBER OF SEQUENCES: 82
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Medlen & Carroll
: STREET: 220 Montgomery Street, Suite 2200
: CITY: San Francisco
: STATE: California
: COUNTRY: United States of America
: ZIP: 94104
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: COMPUTER: IBM PC compatible
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: Patent In Release #1.0, Version #1.30
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: PCT/US97/15394
: FILING DATE:
: CLASSIFICATION:
: ATTORNEY/AGENT INFORMATION:
: NAME: Ingolia, Diane E.
: REGISTRATION NUMBER: 40,027
: REFERENCE/DOCKET NUMBER: OPHD-02304
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: (415) 705-8410
: TELEFAX: (415) 397-8338
: INFORMATION FOR SEQ ID NO: 44:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 472 amino acids
: TYPE: amino acid
: TOPOLOGY: linear
: MOLECULE TYPE: protein
: PCT-US97-15394-44

Query Match 89.4%; Score 2102; DB 1; Length 472;
Best Local Similarity 88.6%; Pred. No. 1.9e-183;
Matches 390; Conservative 26; Mismatches 24; Indels 0; Gaps 0;

QY 1 MANKYSEILLNLIILRYKDNLDLSGAKVEYDGVDELNDKNQFKLTSSANSKIRV 60
Db 33 MFNKYSEILLNLIILRYEDNLDLSGAKVEYDGVKLDNDKNQFKLTSSADSKIRV 92
QY 61 TQNONIIFNSVFLDFSVSEWIRIPKYKNDGIONYIHNEYTIINCMMKNSGWKISIRGNRI 120
Db 93 TQNONIIFNSVFLDFSVSEWIRIPKYRNDIQNIHNEYTIINCMMKNSGWKISIRGNRI 152
QY 121 IWLIDINGTKSVFFFEYNTRDISYINRWFFVTITNNLNNAKIYINGKLESNTDIKDI 180
Db 153 IWLIDINGTKSVFFFEYNTRDISYINRWFFVTITNNLNNAKIYINGTLESNMDIKDI 212
QY 181 REVIANGEIIFKLDGIDRTQFIWMKYFSIFNTLSQSNIEERYKIQSYSEYKDFWGNP 240
Db 213 GEVINGEITFKLDGVDRTQFIWMKYFSIFNTQSNIKIKEYKIQSYSEYKDFWGNP 272
QY 241 LMYNKEYMKNAGKNSYIKLKDSPVGEILTRSKYNQNSKYINRDLYIGKEKFIIRKS 300

Db 273 LMTNKYYMFMNAGKNKNSYIKLVKDSVGEILTRSKYNQNSYINRNLYIGKEKFIIRRES 332
QY 301 NSQSINDDIVRKEDIYLDFFNQLQWRVYTYKFKKKEEKLFLAPISDSDELXNTIOIK 360
Db 333 NSQSINDDIVRKEDIHLDLVLHHEWRVYAYKFKQEKEKFLSLISDSNEFYKTIIEIK 392
QY 361 EYDEOPTYSQCLLFKKDESTDIGLIGHREYFESGIYFEEKYDYFCISKWYLKEVRKRP 420
Db 393 EYDEQPTYSQCLLFKKDESTDIGLIGHREYFESGVLRKKYKDYFCISKWYLKEVRKRP 452
QY 421 YNLKLGCNWQFIPKDEGWTE 440
Db 453 YKSNLGCNMQFIPKDEGWTE 472

Search completed: November 1, 2002, 08:22:56
Job time : 294 secs

GenCore version 5.1.3
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OM protein - protein search, using sw model

Run on: November 1, 2002, 08:15:33 ; Search time 12 Seconds
(without alignments)
66.157 Million cell updates/sec

Title: US-09-910-186a-8
Perfect score: 2350
Sequence: 1 MANKYNSILNIIILRYK.....YNLKGNCWQFIKDGWTE 440

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 7643 seqs, 1804274 residues

Total number of hits satisfying chosen parameters: 7643

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Pending_Patents_AA_Nev.*

- 1: /cgn2.6/ptodata/1/paa/PCT_NEW_COMB.pcp.*
- 2: /cgn2.6/ptodata/1/paa/US06_NEW_COMB.pcp.*
- 3: /cgn2.6/ptodata/1/paa/US07_NEW_COMB.pcp.*
- 4: /cgn2.6/ptodata/1/paa/US08_NEW_COMB.pcp.*
- 5: /cgn2.6/ptodata/1/paa/US09_NEW_COMB.pcp.*
- 6: /cgn2.6/ptodata/1/paa/US10_NEW_COMB.pcp.*
- 7: /cgn2.6/ptodata/1/paa/US60_NEW_COMB.pcp.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	124	5.3	878	6	US-10-092-411A-4378
2	117	5.0	428	6	US-10-092-411A-2942
3	115.5	4.9	912	6	US-10-092-411A-2993
4	115.5	4.9	3696	6	US-10-092-411A-5080
5	114.5	4.9	608	6	US-10-092-411A-4751
6	111	4.7	321	6	US-10-092-411A-2890
7	110	4.7	454	6	US-10-085-198-22
8	109.5	4.7	518	6	US-10-092-411A-4348
9	109	4.6	384	6	US-10-092-411A-4669
10	108.5	4.6	564	6	US-10-092-411A-3930
11	108	4.6	406	6	US-10-092-411A-3544
12	107.5	4.6	331	6	US-10-092-411A-3626
13	104.5	4.4	406	6	US-10-143-087A-309
14	103.5	4.4	703	6	US-10-092-411A-3015
15	102.5	4.4	570	6	US-10-092-411A-2972
16	102.5	4.4	1162	6	US-10-092-411A-4008
17	102.5	4.4	1177	6	US-10-092-411A-5106
18	102	4.3	956	6	US-10-092-411A-4452
19	102	4.3	590	6	US-10-083-198-154
20	101	4.3	670	6	US-10-092-411A-2940
21	101	4.3	10182	6	US-10-092-411A-3159
22	100	4.3	460	6	US-10-092-411A-5322
23	100	4.3	485	6	US-10-092-411A-4294
24	100	4.3	876	6	US-10-092-411A-3943
25	99.5	4.2	870	6	US-10-092-411A-4959
26	99.5	4.2	1211	6	US-10-092-411A-4820

27	98.5	4.2	425	6	US-10-092-411A-5654	Sequence 5654, Ap
28	98	4.2	659	6	US-10-092-411A-5537	Sequence 5537, Ap
29	97.5	4.1	405	6	US-10-092-411A-5259	Sequence 5259, Ap
30	96.5	4.1	312	6	US-10-092-411A-3465	Sequence 3465, Ap
31	96.5	4.1	471	6	US-10-092-411A-4125	Sequence 4125, Ap
32	96.5	4.1	509	6	US-10-092-411A-2996	Sequence 2996, Ap
33	96.5	4.1	1010	6	US-10-092-411A-5178	Sequence 5178, Ap
34	96	4.1	502	6	US-10-092-411A-4511	Sequence 4511, Ap
35	96	4.1	695	6	US-10-092-411A-4341	Sequence 4341, Ap
36	96	4.1	804	6	US-10-092-411A-5218	Sequence 5218, Ap
37	96	4.1	901	6	US-10-092-411A-5351	Sequence 5351, Ap
38	95.5	4.1	473	6	US-10-092-411A-4773	Sequence 4773, Ap
39	95.5	4.1	591	6	US-10-092-411A-3228	Sequence 3228, Ap
40	95.5	4.1	1151	6	US-10-092-411A-3242	Sequence 3242, Ap
41	94	4.0	675	6	US-10-092-411A-4547	Sequence 4547, Ap
42	94	4.0	727	6	US-10-092-411A-4067	Sequence 4067, Ap
43	92.5	3.9	280	6	US-10-092-411A-5506	Sequence 5506, Ap
44	92.5	3.9	691	6	US-10-092-411A-4675	Sequence 4675, Ap
45	92.5	3.9	906	6	US-10-092-411A-3218	Sequence 3218, Ap

ALIGNMENTS

RESULT 1
US-10-092-411A-4378
; Sequence 4378, Application US/10092411A
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCC
; FILE REFERENCE: 032796-101
; CURRENT APPLICATION NUMBER: US/10/092.411A
; CURRENT FILING DATE: 2002-03-07
; PRIOR APPLICATION NUMBER: US 09/134,001
; PRIOR FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/064,964
; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: US 60/055,779
; PRIOR FILING DATE: 1997-08-14
; NUMBER OF SEQ ID NOS: 5676
; SEQ ID NO 4378
; LENGTH: 878
; TYPE: PRI
; ORGANISM: Staphylococcus epidermidis
; US-10-092-411A-4378

Query Match	5.3%	Score 124;	DB 6;	Length 878;
Best Local Similarity	19.9%	Pred. No. 0.73;		
Matches	95;	Conservative	86;	Mismatches 197; Indels 100; Gaps 17;
QY	3	NKYNSEILNIIILRYKKNLIDLS-----		28
Db	255	NKPPSHSDIKISMGYLDNLSLSSNLNLTIGGRTGKSLIELIAYDIAPTSONT		314
QY	29	-----GYGAKVVDGVDELNDKNQKLTASSANSKIRVTQNONIIFNSVFLDFS		76
Db	315	NTSFENICKSLGIGGVKVELIVTSHAQYQKFKIIRKYNEDPIIKDIDNNVSNYTKVIL		374
QY	77	VSWIRIPKNDQIGNYTHNEYTIINCMK-----NNSGWKISIRGNRIIWLIDNG		129
Db	375	PN---IEVYSQNEIIDLTATNENAKLINILNRFDKDRSNKKKEIKTN-----LHS		422
QY	130	KTKSVFEYNIREDISYINRFVFTITNNLAN-AKIYINGKLESNTDIDKIREVIANGE		188
Db	423	NSKSLKAKEDLENLOEKINQ--LPALKKELAHFNLGIGKLEVGQKISREEYIQTK		480
QY	189	IIFKLDGDIRTOFI-----WMKYFSIPT--EJSQSNIEERYKIQSYSEYVKDFW		237
Db	481	QIIE-ONDISIITNIIILPFENYNNQKIKHVEIFDSIKNTDHNKKLKEIKSMFTDLKDTT		539
QY	238	GNPLMYNKYYMENAOKNSYKLLKD-SPVGEIITRSK-----YNQNSKYINYVDLYI		290

[illegible]

```

; Sequence 2993, Application US/10092411A
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCC
; TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 032796-101
; CURRENT APPLICATION NUMBER: US/10/092,411A
; CURRENT FILING DATE: 2002-03-07
; PRIOR APPLICATION NUMBER: US 09/134,001
; PRIOR FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/064,964
; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: US 60/055,779
; PRIOR FILING DATE: 1997-08-14
; NUMBER OF SEQ ID NOS: 5676
; SEQ ID NO 2993
; LENGTH: 912
; TYPE: PRT
; ORGANISM: Staphylococcus epidermidis
US-10-092-411A-2993

Query Match 4.98; Score 115.5; DB 6; Length 912;
Best Local Similarity 19.89; Pred. No. 2.1;
Matches 102; Conservative 78; Mismatches 170; Indels 164; Gaps 26;

QY 1 MANKYNSETLNNIILNRYKDNLLDLSGKAVEYDVGVELDKNOFLTSSANSKIRV 60
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 439 LIDKYN-----NLYKHPRNREIHSFGDKYLYE---NEQSIMSIKS---IKL 482
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 61 TONQNIINSVFLPDSFWSFTRIPKYKNDGIQYINNEYTIINCMKNSGWISTR--GN 118
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 483 LSNSEVEGYS---NSVEFW-----LNEYTSLDCKEKK---EILLRMFSN 521
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 119 RIITWTLIDINGKTKSVFPEYNIREDISEYINRWFF---VTITNNLNNAKIYINGKLE--SN 174
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 522 SKLSVMYGAAGTKST-----LNHCINFFYDKDVIIVANTNTAVDNIKRKIKLSN 572
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 175 TIKIDIREVIANGE-----ITFKLDGDI---DRTQFIWMKYSFISFNTLSQSNIERYKI 226
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 573 IKTSITISKFLYNDKEKYDLLIIDRAGTVSNKNDMNRILENKQFELLI-----VGDNQOI 626
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 227 QS-----XSEYLLKDFWGNPLMYNKYEYFMFAGNKNYSYIKLK---KDSPVGELIRSKY- 276
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 627 ESIDFGNWFELAKVLKSNII-NELTDMYRTKNDLLYFWKSVREKSKSLNEIINNMYKS 685
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 277 -----NQNSK-----YINVRDLY-IGKEFTIRKNSQSINDDIVRKEDYIYLDPFN 322
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 686 TRLDSEIFNEFNKDEIILCLNYDGYGINN---INRLQANNKNSDVI-----730
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 323 LNQWRVYTYKYFKKEEKKLFLAPISDSLEYNT-----IQIKEYDEQPTYSCQL----- 372
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 731 ----NGV---KEYKVGDPILFNETKYSPILFNNLKSGSIEIHVFEYIYLFDEIKNVIN 783
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 373 -----GLGHR-----391
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 784 ELDIISLEIHLDISSENSSVIRIRVEKSDGLNDDDDSDSIVPFOVYSVAIHSKRAQGLE 843
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 392 FYBESGVYFEYKDYFCISKWYLKEVKRKPYNLKL 425
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 844 FNSVKIVISDDLDEITNNIFYTATRARENKI 877
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

RESULT 4
US-10-092-411A-5080
; Sequence 5080, Application US/10092411A
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCC
; TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 032796-101
; CURRENT APPLICATION NUMBER: US/10/092,411A
; CURRENT FILING DATE: 2002-03-07
; PRIOR APPLICATION NUMBER: US 09/134,001

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```

; ORGANISM: Staphylococcus epidermidis
US-10-092-411A-4751

Query Match      4.9%; Score 114.5; DB 6; Length 608;
Best Local Similarity 20.8%; Pred. No. 1.6;
Matches 105; Conservative 78; Mismatches 165; Indels 157; Gaps 25;

QY 3 NKYNSEILNIIILNRKDNNDLDS-----GYGAKVEYDGV---ELNDK--NQF 48
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 162 NEKEKDKINKILFNHOYKRNIVIRKAEISHPIFWYKVIILISLFYKINDKUKUYI 221
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 49 KITSANSKIRVTQONQIIFNSVFLDFSYSFWIRIPKYKNDGIQYIHNEYTIINCMKN 108
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 222 ILHEYAHAKNRDTEHL--IIFHIFSIAMSNPLIQIVKRK-----MIHDN----- 264
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 109 SGWKISIRGNRIIWTLIDINGTKSVFFSYNIREDISYINREFFVT---ITNNLNNAKI 165
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 265 -----EVPADRFV-----LNNINKNEFSY--AEAIMDSVLKTSFNKNIISHFNGKKS 312
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 166 YINGKL-----ESNTDIKDIREVIANGIEIIFKLDGDIRDQFIWMKYFISFIMTELSONSIE 221
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 313 LLKRLRLINIKEGN--LKQSKLLIIFICITFTFIMIOSQFL-----MQQSILTD 359
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 222 ERYKIQSYSEV---LKDFWGNP---LAVN---KEYMFNAGNKNYSIKLKDPSVGEI 270
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 360 YNYKKPLQSDQIILDESKNEFSGSGFVWYSMMKKDYIYN-----EKES----- 404
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 271 LTRSKYNQNSKIYNRDLYIGKPIIRKNSOSINDDIVRKEDYIYIDFNLQOE----- 326
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 405 --RKYSFSDPYKIYALFGLDRHIISDKNSRMSN-----HNYHFPDSSWKKQDLNTA 456
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 327 -----WVYTYKYFKKEEKLFLAPISDS-----DELYN 355
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 457 IQNSVNW-----YFESISNQLSKNYTSQQLNLYGNKNLGSYKAYWLEDSLKISNLEQ 510
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 356 TIQKEVDEQPTY-----SCQLLFKDE--ESTDEIGLIGHRYESG-----IVF 399
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 511 VIVLKNMKEQNHFESKNEKQLSLLIRKKNENYELGKTGTGIVNGYKNGWFGVYIT 570
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 400 BEYKDYFCISKWILKEVKRXPYNLK 424
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 571 NHDKYFF---STHLSDEKASGENAK 592
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

RESULT 6
US-10-092-411A-2890
; Sequence 2890, Application US/10092411A
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
; TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 032796-101
; CURRENT APPLICATION NUMBER: US/10/092,411A
; CURRENT FILING DATE: 2002-03-07
; PRIOR APPLICATION NUMBER: US 09/134,001
; PRIOR FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/064,964
; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: US 60/055,779
; PRIOR FILING DATE: 1997-08-14
; NUMBER OF SEQ ID NOS: 5676
; SEQ ID NO 2890
; LENGTH: 321
; TYPE: PRT
; ORGANISM: Staphylococcus epidermidis
US-10-092-411A-2890

Query Match      4.7%; Score 111; DB 6; Length 321;
Best Local Similarity 19.7%; Pred. No. 1.2; Indels 98; Gaps 20;
Matches 71; Conservative 72; Mismatches 120;

QY 50 ITSSANSKIRV-----TQNKQIFNSVFLDFS-----FWIRI 83
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

```

```

; ORGANISM: Staphylococcus epidermidis
US-10-092-411A-4751

Query Match      4.9%; Score 114.5; DB 6; Length 608;
Best Local Similarity 20.8%; Pred. No. 1.6;
Matches 105; Conservative 78; Mismatches 165; Indels 157; Gaps 25;

QY 3 NKYNSEILNIIILNRKDNNDLDS-----GYGAKVEYDGV---ELNDK--NQF 48
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 162 NEKEKDKINKILFNHOYKRNIVIRKAEISHPIFWYKVIILISLFYKINDKUKUYI 221
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 49 KLTSAKSKIRVTQONQIIFNSVFLDFSYSFWIRIPKYKNDGIQNIYHNEYTIINCMKN 108
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 222 ILHEYAHAKNRDTEHL--IIFHIFSIAMSNPLIQIVKRK-----MIHDN----- 264
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 109 SGWKISIRGNRIIWTLIDINGTKSYFFSEYINREDISEYINREFFVT---JTNNLNNAKI 165
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 265 -----EVPADRFV-----LNNINKNEFSY--AEAIMDSVLKTSFKNILISHFNGKKS 312
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 166 YINGKL-----ESNTDIKDIREVIANGIEIIFKLDGDIRDQFIWMKYFISIFNTELSQSNIE 221
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 313 LLKRLRLINIKEGN--LKQSKLLIIFICITFTFIMIQSOFL-----MQQSILTD 359
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 222 ERYKIQSYSEY---LKDFWGNP---LAVN---KEYYMFNAGNKNYSIKLKDPSVGEI 270
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 360 YNYKKPLQSDQIILDESKNEFSNGSGFVWYSMMKKDYIYN-----EKES----- 404
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 271 LTRSKYNQNSKIYNRDLYIGERPIIRKNSOSINDDIVRKEDYIYLDFFNLQOE----- 326
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 405 --RKYSFSDPYKIYALFGLDRHIIISDKNSRMSN-----HNYHFPDSWNKQDLNTA 456
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 327 -----WVYTYKYFKKEEKLFLAPISDS-----DELYN 355
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 457 IQNSVNW-----YFESISNQLSKNYTSQQLKQNLVGNKNLGSYKAYWLEDSLKISNLEQ 510
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 356 TIQKEVDEQPTY-----SCQLLFKDE--ESTDEIGLIGHRYESEG-----IVF 399
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 511 VIVLKNMKEQNHFESKNEKQLSLLIRKKNENYELGKTGTGIVNGYKNGWFGVYIT 570
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 400 BEYKDYFCISKWILKEVKRXPYNLK 424
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 571 NHDKYFF---STHLSDEKASGENAK 592
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

RESULT 6
US-10-092-411A-2890
; Sequence 2890, Application US/10092411A
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
; TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 032796-101
; CURRENT APPLICATION NUMBER: US/10/092,411A
; CURRENT FILING DATE: 2002-03-07
; PRIOR APPLICATION NUMBER: US 09/134,001
; PRIOR FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/064,964
; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: US 60/055,779
; PRIOR FILING DATE: 1997-08-14
; NUMBER OF SEQ ID NOS: 5676
; SEQ ID NO 2890
; LENGTH: 321
; TYPE: PRT
; ORGANISM: Staphylococcus epidermidis
US-10-092-411A-2890

Query Match      4.7%; Score 111; DB 6; Length 321;
Best Local Similarity 19.7%; Pred. No. 1.2; Indels 98; Gaps 20;
Matches 71; Conservative 72; Mismatches 120;

QY 50 ITSSANSKIRV-----TQNKQIFNSVFLDFS-----FWIRI 83
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

; PRIOR FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/064,964
; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: US 60/055,779
; NUMBER OF SEQ ID NOS: 5676
; SEQ ID NO 5080
; LENGTH: 3696
; TYPE: PRT
; ORGANISM: Staphylococcus epidermidis
US-10-092-411A-5080

Query Match      4.9%; Score 115.5; DB 6; Length 3696;
Best Local Similarity 20.2%; Pred. No. 9.5;
Matches 99; Conservative 81; Mismatches 158; Indels 151; Gaps 27;

QY 2 ANKYNSEILNIIILNRKDNNDLDSGYGAKVEYDGVY---LNDKXQ---FKLTSS 53
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 264 ADFKNYQAIIDNVVALGRKGNPDNDHG-----ENGIEKFSVNSPIIFSTWMTA 316
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 54 ANSK-----IRVTQONQIIFNSVFLDFSYSFWIRIPKYKNDGI-----QNYIHNE 98
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 317 KNRKGGTOLVLRNAENNOEIASTDIQGGGYRFLKLP---DNVHRLKVQFLPMEIHSD 372
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 99 -----YTIINCKNNSGKISIRGNRIIWTLIDINGTKSYFFSEYINR-EDI 144
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 373 FXRIQLHDGRIYFSFIDTICVNSGSHLYKVSQVKNV---XNGKE---FVNTRIENN 426
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 145 SEYI-----NWFVFTITNL-----NNAKI-YINGKLESNT-----DIKDIREVIANGIEI 189
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 427 GNFAAIGQNELTYKVLTPENFEYVDVNSTEVSFVNGVNPSTVNFVDFRQ---NHTL 483
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 190 IFKLDG-----DIDRTOFIWMKYFSIENTELSOISNT-----EERYKIQSYSEYL 233
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 484 TSSNGLNLGRSAQDVAR--FLPNKIILNI--RYKLRPVNISTPREVTFNEAKYKTFSEYI 540
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 234 -----KDFWGNPLM-----YKKEY-----YMFNAGNKNYSIKLKDPSVGE 269
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 541 INTNDNTVGOOTPFISVINMKDDLSEQNKDIIIPSNYTLASYNKYNKRLKRAQTVLDE 600
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 270 ILTRSKYNQNSKIYNRD-LYIGKEFIRKNSQSINDDIVRKEDYIYLDFFNLQOEWR 328
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 601 EINNTPFNQRYSQICIDLLHELQTLTILNVSASRINDKAQEMTDVYI-DSTELTTE-- 657
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 329 VTYTYFKKEEKLFLAPISDSDELYNTIQKEYDQPYSCQLLFKXDEBSTDIGLIG 388
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 658 -----EKDITLVDIQENKNEISNNI-----DDELTDD-----G 685
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 389 IHRFYESGI 397
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 686 VERVKEAGL 694
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

RESULT 5
US-10-092-411A-4751
; Sequence 4751, Application US/10092411A
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
; TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 032796-101
; CURRENT APPLICATION NUMBER: US/10/092,411A
; CURRENT FILING DATE: 2002-03-07
; PRIOR APPLICATION NUMBER: US 09/134,001
; PRIOR FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/064,964
; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: US 60/055,779
; PRIOR FILING DATE: 1997-08-14
; NUMBER OF SEQ ID NOS: 5676
; SEQ ID NO 4751
; LENGTH: 608
; TYPE: PRT

```

Db 1 LVSSIDTKRRIIMKKSVRLYNMIEYCENNRNFKLNDLMESENISSRTALRDIKEIALGV 60
QY 84 PYKNDGIONYTHNYTTINCMKNSGKISIRGNR---IITWILDINGTKSVFFPEYNI 140
Db 61 PLYSNP-----KNGYTTIG---NRDQTKIAITDEELKALVFTLSSISVSNLPF----- 108
QY 141 REDISYINRWFFVITNNLNNAKIYINGKLESNTDIKDIRVIANGEIIFKLDGDIIRT 200
Db 109 QTEYQELAKLY-----NNSNK-----KELINQYNDLFOYFNE-DKY 144
QY 201 QFIWKYFIFNTELSQSNIBERYKIQSYSE-YLKD-FWGNPLMY-NKEYMFNAGKNS 257
Db 145 QF---KSYKLEN-ETIRLAIENKSEFETCYSONYKEQYKGIGIMYKHNHWYFVYVANTESK 200
QY 258 YTKLKDSVPGILTRSKYNSKYNIRVDLYIGBKFIIR-----KSNOSINDDI 309
Db 201 LVNLLNISIKELYEMGE-TQBCNDITWQNF---QOFVKNETAIDILIRSNVGLN-I 254
QY 310 VKKEDYIYDFNLQWVRVYTYKFKKEEKLFLA-----PISDSDELYNTIQI 359
Db 255 LK--GYLWSDYMIENIDETLYLFKSKVNAKDIDFTAKLIVTGGVNVKVPNSLKNVAV 312
QY 360 K 360
Db 313 E 313

RESULT 7
US-10-085-198-22
; Sequence 22, Application US/10085198
; GENERAL INFORMATION:
; APPLICANT: Alsobrook et al.
; TITLE OF INVENTION: Proteins and Nucleic Acids Encoding Same
; FILE REFERENCE: 21402-279
; CURRENT APPLICATION NUMBER: US/10/085,198
; PRIOR FILING DATE: 2002-02-25
; PRIOR FILING DATE: 2001-02-26
; PRIOR FILING DATE: 2001-02-26
; PRIOR FILING DATE: 2001-03-16
; PRIOR FILING DATE: 2001-08-13
; PRIOR FILING DATE: 2001-08-13
; PRIOR FILING DATE: 2001-08-16
; PRIOR FILING DATE: 2001-08-16
; PRIOR FILING DATE: 2001-02-27
; PRIOR FILING DATE: 2001-02-27
; PRIOR FILING DATE: 2001-03-20
; PRIOR FILING DATE: 2001-03-20
; PRIOR FILING DATE: 2001-04-21
; PRIOR FILING DATE: 2001-04-21
; PRIOR FILING DATE: 2001-06-20
; PRIOR FILING DATE: 2001-06-20
; PRIOR FILING DATE: 2001-08-29
; PRIOR FILING DATE: 2001-08-29
; PRIOR FILING DATE: 2001-02-28
; Remaining Prior Application data removed - See file Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 653
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 22
; LENGTH: 4544
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-085-198-22

Query Match 4.7%; Score 110; DB 6; Length 4544;
Best Local Similarity 26.4%; Pred. No. 23;
Matches 51; Conservative 39; Mismatches 61; Indels 42; Gaps 11;
QY 213 TELSOSNIBE-----RKIQSYSEYKDFWGNP-----LMYNKEYMFNAGKNSYIKLKD 264
Db 598 TAVSAIDIDELELVKYIISGNE-LGFFYLPDPSGVQLKKS--LTNSGIKNGNFALRIT 654

QY 265 SPVGILTRSKY-----NNSKYNIRDLTY-----GKFIIRKKSQSINDDIVRK 312
Db 655 ATDGNLADPMSINISVHLGVKSSKFSCTRTVAQKLAELLIKAKANGK-----LNL 708
QY 313 EDYIYDFNLQWVRVYTYKFKKEEKLFLAPISDSDEL---YNTIQIKEYDEQPTYS 369
Db 709 EDG-FLDFYSINRQ-----PYF-----DKSPSDVAVKEDLPVGANILKIKAYDADSGFN 758
QY 370 COLLEFKDEESTD 382
Db 759 GVLFTISGNTD 771
RESULT 8
US-10-092-411A-4348
; Sequence 4348, Application US/10092411A
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCC
; FILE REFERENCE: 032796-101
; CURRENT APPLICATION NUMBER: US/10/092,411A
; CURRENT FILING DATE: 2002-03-07
; PRIOR FILING DATE: 1998-06-13
; PRIOR FILING DATE: 1997-11-08
; PRIOR FILING DATE: 1997-08-14
; NUMBER OF SEQ ID NOS: 5676
; SEQ ID NO 4348
; LENGTH: 518
; TYPE: PRT
; ORGANISM: Staphylococcus epidermidis
US-10-092-411A-4348
Query Match 4.7%; Score 109.5; DB 6; Length 518;
Best Local Similarity 18.7%; Pred. No. 2.4;
Matches 98; Conservative 66; Mismatches 165; Indels 195; Gaps 23;
QY 7 SEILNNILNRYKDNLLIDLSGKAGKVEYDGVDELNDKNOFKLTSSANSKIRVTONQNI 66
Db 61 SENIQTLSNIGFKDDEVILWYQYFTDVKIAPTTYTVD---LISELGNVETRKEQNGV 117
QY 67 IFNSVFLDPSVFWIRIPKYNKDGIQNIHNEYIINCMKNSGKISIRGNRIITWFLID 126
Db 118 -----LRLYNNQQTFTCYLKNANEHYVDRAEFV----- 147
QY 127 INKTKSVFFENIREDISYINRWFFVTIINLNNAKIYI-----NGKLESNTDIKD- 179
Db 148 VNGML-----IRKDFYSYV-RTFSYAPFDNKAKIYMRQFYNNENGSIAYREYIDED 198
QY 180 -----IREVIANGEIIFKLD----- 194
Db 199 EHVFFVDDARLYSKOALVAYFIRQLRLANSEDIILIDRATDVQAILENKSGSKGVVVVHA 258
QY 195 -----GDIDRTQFIWKY-----FSIFNTELSQSNIBERYKIQSYSEYKDFW 237
Db 259 EHFSEGATDGTHTILWNKYEQYFENAAQIHDFITATDQRTLSEQFK-----QYKND- 312
QY 238 GNPLMYNKEYMFNAGKNSYIKLKDSVPGEILTRSKYNSKYNIRVDLYIGEKFIIR 297
Db 313 -----PRITIPVGSIESLOYPEKERKPYSIWTSRL-ANEXHVD---WIVEA-VIK 359
QY 298 RKSNSOSINDDIV-----RKEDIYIL--DFFNLQWVRVYTYKFKKEE 340
Db 360 AKHQLPQLSFDYIGOGEEQEKIKNIITKHRAEDYIQIKGHNRLTIQOY----- 409
QY 341 KLFLAPISDSDELYNTIQ-----IKEYDEQPTYSQOLLFKKDEE 379
Db 410 ELFIA-ASOSEFGJLMEAVSGGLMGICFDVNYGSPFIRHH--QNCILPIDF--EQA 464
QY 380 STDEIGLIGIH---RFYESG-----IVFEYKYDYFCISKW 411

DB 465 STDDTTQIAHMIIRYFEDGPIRAHVSYDIAESFKTSHVLDW 508

RESULT 9

US-10-092-411A-4669

Sequence 4669, Application US/10092411A

GENERAL INFORMATION:

APPLICANT: Lynn Doucette-Stamm et al

TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS

TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS

FILE REFERENCE: 032796-101

CURRENT APPLICATION NUMBER: US/10/092.411A

CURRENT FILING DATE: 2002-03-07

PRIOR APPLICATION NUMBER: US 09/134,001

PRIOR FILING DATE: 1998-08-13

PRIOR APPLICATION NUMBER: US 60/064,964

PRIOR FILING DATE: 1997-11-08

PRIOR APPLICATION NUMBER: US 60/055,779

PRIOR FILING DATE: 1997-08-14

NUMBER OF SEQ ID NOS: 5676

SEQ ID NO 4669

LENGTH: 384

TYPE: PR

ORGANISM: Staphylococcus epidermidis

US-10-092-411A-4669

Query Match 4.6%; Score 109; DB 6; Length 384;

Best Local Similarity 22.28; Pred. No. 1.8; Indels 106; Gaps 25;

Matches 88; Conservative 63; Mismatches 139;

DB 111 WKISGRNIWTLIDNG--TKSVFFEYNIRE--DISEYINRWFFVITNNLNNAKIY 166

DB 5 YTIKIR-NELIMKIVEKSKNGTGMILDDGNEPIVDVAVYRK--YLDVSKKSLNKKTY 61

DB 167 INKLESNTDKIDREVIANGELIFK---LDGIDRTQI--WVK---YFSFNTLSQS 218

DB 62 AVA-----LAKFVLESKKICYEVDNFV---FIRWKKTFEYENVLSVHRKEK 111

DB 219 NIEER-----YKIQSYSEYL-----KDFWGNPLMYNKYMFNAGKNKY----- 258

DB 112 SISPKINTLTWVSFNFDYLYRSKLDVNFDFMHWESKYSKKYSFHHINKDYRLK 171

DB 259 --IKLKDSVPGEILTRSKYNQNSKYINRDLIGKEFIIR-----RKNSQSIN-DD 308

DB 172 NILKVEPKKIEVLTNAEVRKLLLEAAN---NIRKFTJQLLYETGLRIGEVSLRIDD 227

DB 309 I---VRKEDIYL-DFFNLQGEWRVITYKFKKEEKLFLA-----PISD--- 349

DB 228 IKFDFRKHQIVLKNRFDNG-----TYLTKGERKIFISQSLDLYDDVYIEIDLS 280

DB 350 --SDELYNTIQIKVEDEPTYS-QQLFKKDEESTDEIGLIGH---RFGSGVIFVEY 402

DB 281 ICSXDLFKIKGRNVGEAMNYSDFLSFKLKKTS-----INVHPLRHTHATVYFNET 336

DB 403 KDYFCISKWYKVRK--PYNLXGNCWQFIPKDE 436

DB 337 KD-----IKQVRLGHNSIQTTLNLYVHTEE 364

RESULT 10

US-10-092-411A-3930

Sequence 3930, Application US/10092411A

GENERAL INFORMATION:

APPLICANT: Lynn Doucette-Stamm et al

TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS

TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS

FILE REFERENCE: 032796-101

CURRENT APPLICATION NUMBER: US/10/092.411A

CURRENT FILING DATE: 2002-03-07

PRIOR APPLICATION NUMBER: US 09/134,001

PRIOR FILING DATE: 1998-08-13

PRIOR APPLICATION NUMBER: US 60/064,964

PRIOR FILING DATE: 1997-11-08

NUMBER OF SEQ ID NOS: 5676

SEQ ID NO 3930

LENGTH: 564

TYPE: PR

ORGANISM: Staphylococcus epidermidis

US-10-092-411A-3930

Query Match 4.6%; Score 108.5; DB 6; Length 564;

Best Local Similarity 19.1%; Pred. No. 2.9; Indels 145; Gaps 25;

Matches 87; Conservative 76; Mismatches 147;

DB 2 ANKYNSEILNMIILNRYKNNLIDLSGKAKVEYVDG--VE--LND-----KNQFK 49

DB 57 ATSYHPKMMXLKVL-----YATQSVFSGRKIEKLNDLSIRMWLSQNO-K 101

DB 50 LTSSANSKIRYTONQNIENSFVLDVSVSWIRPKYKNDGIONTHIYTTINGMKN- 108

DB 102 PSYKTINFRVNPVDALESLEFIQF-----HSQ-----CLKQNL 136

DB 109 -----SGWKISIRGNR--IIWTL-----IDINGKTSVFFEYNIREDSYINRW 152

DB 137 IDQAFIDGTGKVEANANRYTFVWKKSIQNHESRMENSKALYHELVIKTIPE-IKK-- 193

DB 153 FVTITNNLNNAKIYKINGLESNTDKIDREVIANGELIFKLDGIDRTQFIWVKYFSIFN 212

DB 194 --DHNDUTKEIDLIGS-HLCKEIDLNQHDNKC----- 227

DB 213 TELSQSNIEERYKIQSYSEYLKDFWGNPLMYNKYMFNAGKNKYIKLKDSVP----- 267

DB 228 TKIRQIRLKTIKKIKKQINDYSQKHKHYEQKSIK--DRNSYKTDHDAFMKKE 285

DB 268 -----GEILTSKYN---QNSKYINRYDLICE-----KFIIRKSNQSINDDIVR 311

DB 286 DHMKNGQL--RPGNLOIATNSQFVLFYDQVNPTRTMTPIFLNTIQTGYCHUPEYIA 343

DB 312 KEDY-----IYLDFFNLQGEWRVITYKFKKEEKLFLAPISDSDELYNTIQIKEYDE 364

DB 344 DAGYSGEANYWALIDNENRTP---LITYGMFIKDKTKKY-----KSDIFNT-QNWYDE 393

DB 365 -QPIYSC---QILFKKDEESTDEIGLIGHREYE 394

DB 394 INDEFICPNNRRLGFKRYAYRHDYKFGKRDKLYE 428

RESULT 11

US-10-092-411A-3544

Sequence 3544, Application US/10092411A

GENERAL INFORMATION:

APPLICANT: Lynn Doucette-Stamm et al

TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS

TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS

FILE REFERENCE: 032796-101

CURRENT APPLICATION NUMBER: US/10/092.411A

CURRENT FILING DATE: 2002-03-07

PRIOR APPLICATION NUMBER: US 09/134,001

PRIOR FILING DATE: 1998-08-13

PRIOR APPLICATION NUMBER: US 60/064,964

PRIOR FILING DATE: 1997-11-08

PRIOR APPLICATION NUMBER: US 60/055,779

PRIOR FILING DATE: 1997-08-14

NUMBER OF SEQ ID NOS: 5676

SEQ ID NO 3544

LENGTH: 406

TYPE: PR

ORGANISM: Staphylococcus epidermidis

US-10-092-411A-3544

Query Match 4.6%; Score 108; DB 6; Length 406;

Best Local Similarity 19.5%; Pred. No. 2.2; Indels 112; Gaps 21;

Matches 77; Conservative 73; Mismatches 132;

DB 465 STDDTTQIAHMIIRYFEDGPIRAHVSYDIAESFKTSHVLDW 508

DB 465 STDDTTQIAHMIIRYFEDGPIRAHVSYDIAESFKTSHVLDW 508

RESULT 9

US-10-092-411A-4669

Sequence 4669, Application US/10092411A

GENERAL INFORMATION:

APPLICANT: Lynn Doucette-Stamm et al

TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS

TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS

FILE REFERENCE: 032796-101

CURRENT APPLICATION NUMBER: US/10/092.411A

CURRENT FILING DATE: 2002-03-07

PRIOR APPLICATION NUMBER: US 09/134,001

PRIOR FILING DATE: 1998-08-13

PRIOR APPLICATION NUMBER: US 60/064,964

PRIOR FILING DATE: 1997-11-08

PRIOR APPLICATION NUMBER: US 60/055,779

PRIOR FILING DATE: 1997-08-14

NUMBER OF SEQ ID NOS: 5676

SEQ ID NO 4669

LENGTH: 384

TYPE: PR

ORGANISM: Staphylococcus epidermidis

US-10-092-411A-4669

Query Match 4.6%; Score 109; DB 6; Length 384;

Best Local Similarity 22.28; Pred. No. 1.8; Indels 106; Gaps 25;

Matches 88; Conservative 63; Mismatches 139;

DB 111 WKISGRNIWTLIDNGK--TKSVFFEYNIRE--DISEYINRWFFVITNMLNNAKIY 166

DB 5 YTIKIR-NELIMKIVEKSKNGTGMILDDGNEPIVDVAVYRK--YLDVSKKSLNKKTY 61

DB 167 INKLESNTDKIDREVIANGELIFK---LDGIDRTQI--WVK---YFSFNTLSQS 218

DB 62 AVA-----LAKFVLESKKICYEVDNFV---FIRWKKTFEYENVLSVHRKEK 111

DB 219 NIEER-----YKIQSYSEYL-----KDFWGNPLMYNKYMFNAGKNKY----- 258

DB 112 SISPKINTLMTVSNFYDLYRSKLLDVFDFMHWESKYSKKYSFHHINKDYRLK 171

DB 259 --IKLKDSVPGEILTRSKYNQNSKYINRDLIGKEFIIR-----RKNSQSIN-DD 308

DB 172 NILKVEPKKIEVLTNAEVRKLLLEAAN---NIRKFTJQLLYETGLRIGEVLSRIDD 227

DB 309 I---VRKEDIYL-DFFNLQGEWRVYTYKFKKEEKLFLA-----PISD--- 349

DB 228 IKFDFRKHQIVLKNRFDNG-----TYLTKGERKIFISQSLDLYDDVYIEIDLS 280

DB 350 --SDELYNTIQIKVEDEPTYS-QQLFKKDEESTDEIGLIGH---RFGESGVIFREY 402

DB 281 ICSXDLFKIKGRNVGEAMNYSYLSFKLKKTKS-----INVPHLFRHTATVYFNET 336

DB 403 KDYFCISKWYKVRK--PYNLXGNCWQFIPKDE 436

DB 337 KD-----IKQVRLGHNSIQTINLVVHTEE 364

RESULT 10

US-10-092-411A-3930

Sequence 3930, Application US/10092411A

GENERAL INFORMATION:

APPLICANT: Lynn Doucette-Stamm et al

TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS

TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS

FILE REFERENCE: 032796-101

CURRENT APPLICATION NUMBER: US/10/092.411A

CURRENT FILING DATE: 2002-03-07

PRIOR APPLICATION NUMBER: US 09/134,001

PRIOR FILING DATE: 1998-08-13

PRIOR APPLICATION NUMBER: US 60/064,964

PRIOR FILING DATE: 1997-11-08

NUMBER OF SEQ ID NOS: 5676

SEQ ID NO 3930

LENGTH: 564

TYPE: PR

ORGANISM: Staphylococcus epidermidis

US-10-092-411A-3930

Query Match 4.6%; Score 108.5; DB 6; Length 564;

Best Local Similarity 19.1%; Pred. No. 2.9; Indels 145; Gaps 25;

Matches 87; Conservative 76; Mismatches 147;

DB 2 ANKYNSEILNMIILNRYKNNLIDLSGKAKVEYVDG--VE--LND-----KNQFK 49

DB 57 ATSYHPKMLXVVL-----YATQSVFSGRKIEKLNDLSIRMWLSQNO-K 101

DB 50 LTSSANSKIRYTONQNIENSFVLDVSVSWIRIPKYKNDGIONTHYEITINGMKN- 108

DB 102 PSYKTINFRVNPVDALESLEFIQF-----HSQ-----CLKQNL 136

DB 109 -----SGWKISIRGNR--IIWTL-----IDINGTKSVFFEYNIREIDSEYNRWF 152

DB 137 IDDOAIFIDGTKEVNEANRYTFVWKKSIQNHESRMENSKALYHELVIKTIPE-IKK-- 193

DB 153 FVTITNLLNAKIYKINGLESNTDKIDREVIANGELIFKLDGIDRTQFIWMKYFSIFN 212

DB 194 --DHNDUTKEIDLIGS-HLCKEIDLNQHDNKC----- 227

DB 213 TELSQSNIEERYKIQSYSEYLKDFWGNPLMYNKYMFNAGKNKYIKLKDSVP----- 267

DB 228 TKIRQIRLKTIKKIKKQINDYSQKHKHYEQKSIK--DRNSYKTDHDAFMKKE 285

DB 268 -----GEILTSKYN---QNSKYINRYDLICE-----KFIIRKSNQSINDDIVR 311

DB 286 DHMKNGQL--RPGNLOIATNSQFVLFDYQVNPDTTRMIFLNTIQTGYCHUPEYIVA 343

DB 312 KEDY-----IYLDFFNLQGEWRVYTYKFKKEEKLFLAPISDSDELYNTIQIKEYDE 364

DB 344 DAGYSGEANYWALIDNENRTP---LITYGMFIKDKTKY-----KSDIFNT-QNWDYDE 393

DB 365 -QPIYSC---QILFKKDEESTDEIGLIGHREYE 394

DB 394 INDEFICPNNRRLGFKRYAYRHDYKFGKRDKLYE 428

RESULT 11

US-10-092-411A-3544

Sequence 3544, Application US/10092411A

GENERAL INFORMATION:

APPLICANT: Lynn Doucette-Stamm et al

TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS

TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS

FILE REFERENCE: 032796-101

CURRENT APPLICATION NUMBER: US/10/092.411A

CURRENT FILING DATE: 2002-03-07

PRIOR APPLICATION NUMBER: US 09/134,001

PRIOR FILING DATE: 1998-08-13

PRIOR APPLICATION NUMBER: US 60/064,964

PRIOR FILING DATE: 1997-11-08

PRIOR APPLICATION NUMBER: US 60/055,779

PRIOR FILING DATE: 1997-08-14

NUMBER OF SEQ ID NOS: 5676

SEQ ID NO 3544

LENGTH: 406

TYPE: PR

ORGANISM: Staphylococcus epidermidis

US-10-092-411A-3544

Query Match 4.6%; Score 108; DB 6; Length 406;

Best Local Similarity 19.5%; Pred. No. 2.2; Indels 112; Gaps 21;

Matches 77; Conservative 73; Mismatches 132;

DB 465 STDDTTQIAHMIIRYFEDGPIRAHVSYDIAESFKTSHVLDW 508

[illegible]

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RESULT 12
US-10-092-411A-3626
; Sequence 3626, Application US/10092411A
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
; TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 032796-101
; CURRENT APPLICATION NUMBER: US/10/092,411A
; CURRENT FILING DATE: 2002-03-07
; PRIOR APPLICATION NUMBER: US 09/134,001
; PRIOR FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/064,964
; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: US 60/055,779
; PRIOR FILING DATE: 1997-08-14
; NUMBER OF SEQ ID NOS: 5676
; SEQ ID NO 3626
; LENGTH: 331
; TYPE: PRT
; ORGANISM: Staphylococcus epidermidis
US-10-092-411A-3626

```

Query Match 4.6%; Score 107.5; DB 6; Length 331;
Best Local Similarity 20.8%; Pred. No. 1.9;
Matches 71; Conservative 50; Mismatches 106; Indels 115; Gaps 14;

Qy	127	I N G K T K S V ----- F F E Y W I R E - D I S E Y I N R M F W T T I T N ----- L N N A K I Y 167 : : : :
Dz	23	V E K K T R E I V N D Y L G Q I D D R N Y K N L Y E S D L T P I E E T L T M P F F S N K K A I V Y K N S V F T 82 : : : :
Qy	168	N G K ---- L E S N T D I K D R E V I A N G E I F L K D G J D I R T O F I W K K Y F S F N T E L S Q S N I E R 223 : : : :
Dz	83	G E K F S K D L H N S D --- E L I -- K F L E K Y D G E-----N U I I F E V Y O P K L D R 122 : : : :
Qy	224	K Y I ----- Q S Y E V L K D F W G N P L M K N E Y T M F M A G N K N S Y I K L K D S P V G E 269 : : : :
Dz	123	K L I T K L K K N A Q L K C I O M S E X E L K H W I N T L-----N N N Y K D I Q D A L E L F 169 : : : :
Qy	270	I - L T R S K Y N Q N S K Y I N F R D L Y I G E K F I I R K K S N S O S I N D I V R K E D Y I--Y L D F F N L A G E 326 : : : :
"Db	170	I E L T G V N Y N I V S G E L E K . I L F I G E R P T I N K E D I L I N S I E O N Y E L L T E V I O K N K N K A 229 : : : :

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Qy 327 WVVYVYKFKKEEKFLPLAISDSDELYNTIQIKVEYDQPYSCOLLFKKDEESTDEIGL 368
Db 230 IQLVDLIMKEEPIKILATISNYRI-----YCKILSQK-----GY 268
Qy 387 IGTHFYFSGIVFEYKDYFCISKWYLKEVKRKPYNLKGCN 428
Db 269 SG-----QIAKTVNAEPRVKIALN 289

```

```

RESULT 13
US-10-145-087A-309
; Sequence 309, Application US/10145087A
; GENERAL INFORMATION:
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Baker Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnovers, Luc
; APPLICANT: Eaton, Dan
; APPLICANT: Ferrara, Napoleon
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Kuo, Sophia S.
; APPLICANT: Napier, Mary A.
; APPLICANT: Pan, James
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; TITLE OF INVENTION: Secreted and Transmembrane Polypeptide
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: P2630PIC47
; CURRENT APPLICATION NUMBER: US/10/145,087A
; CURRENT FILING DATE: 2001-10-18
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; PRIOR FILING DATE: 2001-07-30
; PRIOR APPLICATION NUMBER: 60/062250
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; PRIOR APPLICATION NUMBER: 60/066364
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; PRIOR APPLICATION NUMBER: 60/077632
; PRIOR FILING DATE: 1998-03-11
; PRIOR APPLICATION NUMBER: 60/077641
; PRIOR FILING DATE: 1998-03-11
; PRIOR APPLICATION NUMBER: 60/077649
; PRIOR FILING DATE: 1998-03-11
; PRIOR APPLICATION NUMBER: 60/077791
; PRIOR FILING DATE: 1998-03-12
; Remaining Prior Application data removed - See File #
; NUMBER OF SEQ ID NOS: 624
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